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- Bădescu, Radu. 3337: (with Dumitrescu, Eugeniu) On an integrofunctional equation.
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  On the continuity of positive linear operators.

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- Baker, George A., Jr. 1882: (with Gammel, J. L.; Hill, B. J. and Wills, John G.) Exact numerical solution of a three-body ground-state problem.
- Baker, I. N. 4082: Permutable power series and regular iteration.
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  Ball, B. J. 4506: Penetration indices and applications.

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- Bembroo, S. N. 2526: Parameter of distribution of  $\phi$ -congruence. 3452: Skewness of distribution of the lines of  $\varphi$ -congruence. 4428: Parameter of distribution of an isotropic congruence.
- Banaschewski, B. 2007: Orderable spaces.
  equivalent with the axiom of choice.
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  5490: Über Hausdorffsch-minimale Erweiterung von Raumen.
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- Banerjee, D. P. 405: Generalised Meijer transforms. 590: On the forms of some invariants of probability distribution.
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- Barrett, E. B. 1784: (with Whitmer, R. F.) Nonlinear interaction of an electromagnetic wave with a plasma layer in the presence of a static magnetic field. II. Higher harmonics and a nonlinear propagation theory.
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Barton, G. 4843: (with Kacser, C.) Some analytic properties of a decay amplitude with final state interactions. I. The vertex diagrams in  $K \rightarrow 3\pi$  decay.

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Behr, Christoph. 8774: Eine Verallgemeinerung des Friedmannschen Weltmodells mit positiver Raumkrümmung.

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Behrens, Ernst-August. 3060: Die Halbgruppe der Ideale in Algebren mit distributivem Idealverband.

Bel, Louis. 1927: Les états de radiation et le problème de l'énergie en relativité générale.

Belaga, E. G. 2286: The reducibility of a system of ordinary differential equations in the neighborhood of a conditionally periodic motion.

Belinfante, F. J. 3785: (with Garrison, J. C.) On the uniqueness of Fock's harmonic coordinate systems in the presence of statio, spherically symmetric sources.

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Belousov, V. D. 4018: (with Aczél, J. and Hosszú, M.) Generalized associativity and bisymmetry on quasigroups.

Belova, A. V. 1895: (with Vallander, S. V.) Integral kinetic equations for a gas mixture with internal degrees of freedom. 2876: (with Vallander, S. V.) Integral kinetic equations of mono-atomic gas theory in the presence of an external mass-force field.

Beleva, M. M. 5221: On bounded solutions of non-linear second-order differential equations.

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\$298: (with Niell, A. M.) Apparent resonances of weakly nonlinear standing waves.

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- Berezkina, E. I. 4: Le traité mathématique de Sun-zi Suan-Jing.
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- Berger, Robert. 2088: Ausdehnung von Derivationen und Schachtelung der Differente.
- Berghammer, J. 1776: Landau damping of space-charge waves.

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- Berkevitz, Leonard D. 2470: Variational methods in problems of control and programming. 3802: An optimum thrust control prob-4961: On control problems with bounded state variables.
- Berman, D. L. 2354: On the distribution of the nodes in the interpolation process of S. N. Bernstein. 2355: Application of interpolatory polynomial operators to solve the moment problem. 2367: Polynomial operations commuting with translation.
- Berman, S. D. 3095: (with Gudivok, P. M.) Integral representations of
- Berman, Simeon M. 1570: An extension of the arc sine law. 5535: Limiting distribution of the maximum term in sequences of dependent random variables.
- Bernardo, É. Aparisio. See Aparisio Bernardo, É. Bernhardt, F. 1722: Transformation der Bewegungsgleichungen in ein System von Differentialgleichungen I. Ordnung.
- Bernstein, B. 796: Remarks on materials of the rate type and the principle of determinism.
- Bernstein, I. B. 1898: (with Robinson, B. B.) A variational description of transport phenomena in a plasma.
- Bernštein, I. N. 4065: On the set traced by a straight line segment. Bernstein, M. 1763: (with Zadoff, L. and Reinheimer, Julian) The
- application of integral theorems in magnetohydrodynamics. Berruti Onesti, Natalia. 3134: A proposito del lemma di Gronwall per le funzioni di due variabili. 3391: A proposito delle estremali relative ad integrali curvilinei dello spazio in forma parametrica.
- Bers, L. 191: Uniformizzazione e moduli. Berstein, I. 2604: (with Ganea, T.) The category of a map and of a cohomology class. 4535: (with Ganea, T.) On the homotopy-
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- Bers, Edgar. 2595: Kegelschnitte in desarguesechen Ebenen. Besala, P. 329: On solutions of non-linear parabolic equations defined in unbounded domains
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- nertnyh, G. A. 431: Two methods for approximate solution of operator equations in Hilbert space. 1245: (with Levin, A. Ju.) Some bounds for differentiable functions of one variable.
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- Betsch, Gerhard. 3068: Ein Radikal für Fastringe.
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- Bhatia, Nam Parshad. 1166: Kriterien für die Definitheit quadratischer Formen mit veränderlichen Koeffizienten. 4195: Anwendung der direkten Methode von Ljapunow zum Nachweis der Beschränktheit und der Stabilität der Lösungen einer Klasse nichtlinearer Differentialgleichungen zweiter Ordnung.
- Bhatnagar, M. S. 1021: (with Kushwaha, R. S.) Mechanical decay of a spherical shock wave in a stellar atmosphere.
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- Bhattacharya, P. K. 4600: Some properties of the least squares estimator in regression analysis when the predictor variables are stochastic.
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- Bienenstock, A. 2880: (with Ewald, P. P.) Structure theories in physical and in Fourier space.
- Bierlein, Dieter. 1631: Eine Bemerkung zur diskreten gemischten Erweiterung eines unendlichen Spieles.
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- Bile, E. H. 1617: (with van de Hulst, H. C.) Methods for computing the original orbits of comets.
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0

- Birch, John J. 4573: Approximation for the entropy for functions of Markov chains.
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- Birman, M. S. 2314: Perturbations of the continuous spectrum of a singular elliptic operator by varying the boundary and the boundary conditions. 2447: (with Krein, M. G.) On the theory of wave operators and scattering operators. 2803: On the number of eigenvalues in a quantum scattering problem.
- Birnbaum, Allan. 1623: On the foundations of statistical inference.
- Bisbee, E. F. 1687: (with Oliver, R. M.) Queuing for gaps in high flow traffic streams.
- Bishop, Errett. 4131: Some global problems in the theory of functions of several complex variables. 5191: Partially analytic spaces. 5419: Analyticity in certain Banach algebras.
- Bittner, R. 4316: Operational calculus in linear spaces.
- Bjorken, J. D. 1815: (with Goldberg, A.) A test of approximation methods in potential scattering.
- Blachman, Nelson M. 3598: A generalization of Woodward's theorem on FM spectra.
- Blackwell, David. 2927: Minimax and irreducible matrices.
- Biagoveščenskii, Ju. N. 2632: (with Freidlin, M. I.) Some properties of diffusion processes depending on a parameter. 2640: Diffusion processes depending on a small parameter.
- Mair, R. L. 1530: On a theorem of Isbell concerning extremally disconnected P-spaces. 2440: (with Eurrill, Claude W.) Direct decompositions of lattices of continuous functions. 2988: (with Anderson, F. W.) Representations of distributive lattices as lattices.
- Hlank, Ja. P. 2522; On translation surfaces of constant curvature.
- Biankenbecier, R. 3745: (with Cook, L. F. and Goldberger, M. L.) Is the photon an elementary particle?
- Blanusa, D. 1509: C<sup>10</sup>-isometric imbeddings of the hyperbolic plane and of cylinders with hyperbolic metric in spherical spaces.
- Blatt, J. M. 4882: Local properties in non-equilibrium systems.
- Blatter, Christian. 3484; Zur Riemannschen Geometrie im Grossen auf dem Möbinsband.
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- Blakek, M. 3702: On some equations for potential scattering. 4794:
  Explicit determination of a potential with n bound states by means of the solution of the inverse problem.
- Ricicher, M. N. 3047: Complementation of independent subsets and subspaces of generalized vector spaces.
- Henk, Hermann. 5647: Recent German contributions to aerodynamics and flight dynamics.
- Blischke, W. R. 675: Moment estimators for the parameters of a mixture of two binomial distributions.
- Block, H. D. 1957: The perceptron: a model for brain functioning. I. 1958: (with Knight, B. W., Jr. and Rosenblatt, F.) Analysis of a four-layer series-coupled perceptron. II.
- Block, Richard. 3973: Trace forms on Lie algebras.
- Bleb, V. I. 1683: On the use of plane harmonic functions in solving three-dimensional static problems in the theory of elasticity of an isotropic body.
- Biohineev, D. I. 3705: On elastic pion and nucleon scattering at high energies.
- Blokhintsev, D. I. = Blohincev, D. I.
- Blondel, Jean-Marie. 2336: Étude de deux problèmes ainguliers, relatifs aux équations aux dérivées partielles, linéaires et hyperboliques, du second ordre.
- Bleuns, E. I. 1911: Formalisms of band theory. 3760: Bloc electrons in a magnetic field.
- Blumenthal, R. M. 1581: (with Getoor, R. K.) The dimension of the set of zeros and the graph of a symmetric stable process. 5550: (with Getoor, R. K. and McKean, H. P., Jr.) Markov processes with identical hitting distributions.
- Beas, R. P., Jr. 1286: An inequality for nonnegative entire func-
- Beechieri, P. 5750: (with Loinger, A.) Equivalence between the A→0 limit of the classical "Wellenbild" and the hydrodynamical theory of superconductivity.

- Bochner, S. 4130: Entire functions in several variables with constant absolute values on a circular uniqueness set.
- Boclé, Jean. 3148: Sur la théorie ergodique.
- Bodmer, W. F. 2706: A method of evaluating the complex zeros of polynomials using polar co-ordinates.
- Bodner, V. A. 1983: (with Kozlov, M. S.) On the dynamics of control systems which include inertial coordinate measuring devices.
- Bogarjan, O. K. 5594: Convergence of the remainder in the Bubnov-Galerkin and Ritz methods.

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- Bogdan, Radu C. 3622: (with Pelecudi, Chr.) Contributions to the kinematics of Chebychev's dyad.
- Bogdanoff, J. L. 4626: (with Kozin, F.) On the statistical analysis of the motion of some simple two-dimensional linear vehicles moving on a random track.
- Begdanov, Ju. S. 245: On the simplest differential equation which is not total. 248: (with Čebotarev, G. N.) On matrices which commute with their derivatives. 249: The set of periods of a collection of cycles.
- Begdaneva, M. P. 4157: On a generalization of the method of variation of parameters.
- Bogdanowiez, W. 450: A proof of Schwartz's theorem on kernels.
- Bogojavlenskii, A. A. 787: Cyclic displacements for the generalized area integral.
- Bogoliubov, N. N. = Bogoljubov, N. N.
- Bogoljubov, N. N. 5242: (with Mitropolsky, Y. A.) \*Asymptotic methods in the theory of non-linear oscillations. 5246: (with Sadovnikov, B. I.) On a variant of the averaging method. 5748: (with Tolmachev, V. V. and Shirkov, D. V.) \*A new method in the theory of superconductivity.
- Bogul, A. A. 3740: (with Fedorov, F. I.) A covariant description of spin properties of particles and its application.
- Boguss, Władysław. 3222: A two-tensor method for investigating nonlinear systems.
- Behm, D. 1801: (with Aharonov, Y.) Remarks on the possibility of quantum electrodynamics without potentials. 2790: Classical and non-classical concepts in the quantum theory.
- Bohn, Elwood. 2267: (with Jackson, Lloyd K.) The Liouville theorem for a quasi-linear elliptic partial differential equation.
- Bojanie, R. 2319: (with Bergman, S.) On some relations between integral operators. 4129: (with Stoll, W.) A characterization of monomials.
- Bojarska, Maria. 3025: Sur une propriété des développements à base quelconque.
- Bekut', L. A. 3957: Imbedding of algebras into algebraically closed algebras.
- Boland, J. Ch. 2596: (with Lekkerkerker, C. G.) Representation of a finite graph by a set of intervals on the real line.
- Beley, Brune, A. 4783: A method of heat conduction analysis of melting and solidification problems.
- Belotin, V. V. 832: Non-conservative problems in the theory of elastic stability. 3631: An asymptotic method for the study of the problem of eigenvalues for rectangular regions.
- Bol'iev, L. N. 2663: On estimates of probabilities.

  Bolster, M. F. 266: (with Farrell, O. J.) On approximation by functions
- Boltjanskii, V. G. 2461: (with Antonovskii, M. Ja. and Sarymsakov,
- T. A.) Topological semi-fields.
  Bompiani, E. 4434: Configurations associées à un élément curviligne du troisième ordre dans l'espace projectif.
- Bondar, M. G. = Bondar', N. G.
- Bondar', N. G. 3234: Solution of the problems of nonlinear oscillations of frictionless systems by the method of a variable time scale. 5624: Approximate integration of the oscillation equations of non-linear systems with slowly varying parameters.
- Bendar', V. D. 4671: On tensorial characteristics of finite deformations of a continuous medium.
- Bondarenke, P. S. 2265: The continuous dependence of solutions of differential equations on the initial conditions. 4639: A class of numerical algorithms for approximate integration of ordinary differential equations with initial conditions.
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Benham, Russell A. 4149: Some asymptotic formulas for the Legendre functions  $P_{\nu}^{\mu}$  (cos  $\theta$ ) and Bessel functions  $J_{\nu}(x)$  for small  $\theta$  and x.

Bonnet, Georges. 5544: Sur la statistique du second ordre des signaux aléatoires quantifiés. 5545: Sur certaines propriétés des fonctions de corrélation de signaux laplaciens quantifiés.

Bonner, W. B. 1808: (with Rotenberg, M. A.) Transport of mome..tum by gravitational waves: the linear approximation.

Boot, J. C. G. 1957: Notes on quadratic programming: The Kuhn-Tucker and Theil-Van de Panne conditions, degeneracy, and equality constraints.

Boothby, William M. 582: A note on homogeneous complex contact

Besp, F. 5687: Prinzipien ? . Elektrodynamik.

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Beravley, A. F. 4448: Curves of constant curvature from the projective

hers, H.-J. 5713: On structure of the algebra of field operators. Bordelon, Derrill J. 674: Best linear estimate of missile location based on diverse simultaneous tracking data.

Borel, Armand. 5067: (with Harish-Chandra) Arithmetic subgroups of algebraic groups. 5068: Some properties of adele groups attached to algebraic groups.

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Borel, F. 497: Sur certaines propriétés invariantes par déformation des congruences de droites, de cercles ou de sphères.

Berevič, Z. I. 5057: On regular local fields.

Berisev, Ju. 7. 1480: Mappings of a pseudo-Euclidean space which preserve isotropic vectors

Borisovič, Ju. G. 5371: Stability of critical values of functionals.

Berodin, L. F. 1965: Equidistant and other optimal and near-optimal codes.

Berevikev, V. A. 5284: Some sufficient conditions for the absence of gaps.

Berevkev, A. A. 5536: Asymptotic representations of generating functions and limit theorems for boundary-value problems.

Berovskii, Ju. E. 306: Completely integrable Pfaffian systems. Borwein, D. 4277: (with Shawyer, B. L. R.) On Riesz summability

factors. Bos, Werner. 2148: Zur Klassifikation der einfachen Lie-Gruppen.

Bosanquet, L. S. 5352: The summability of Laplace-Stieltjes integrals. II

Bose, R. C. 5583: (with Connor, W. S.) Analysis of fractionally replicated 2"3" designs (1, 2).

Bott, Raoul. 2615: Vector fields on spheres and allied problems.

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Bottenbruch, H. H. 3619: (with Grau, A. A.) On translation of Boolean

Boulware, David G. 3707: (with Gilbert, Walter) Connection between gauge invariance and ma

Bourbaki, N. 4021: ★Éléments de mathématique. Première partie. (Fascicule III.) Livre III: Topologie générale. Chapitre 3: Groupes topologiques. Chapitre 4: Nombres réels. 4480: \*Éléments de mathématique. Première partie. (Fascicule II.) Lévre III : Topologie générale. Chapitre 1 : Structures topologiques. Chapitre 2 : Structures uniforme

Bourne, Samuel. 555: On locally compact positive halffields. 4378: On normed semialgebras. 4379: On Banach \*-semialgebras.

Bouten-Denys, M.-C. 2813: Remarks on a new variational method.

Bouzon, Jean. 5474a: Structures presque eccomplexes. I. 5474b: Structures presque cocomplexes. II.

Bowen, N. A. 199: On the zeros of canonical products of integral order, Box, G. E. P. 4608: (with Watson, G. S.) Robustness to non-normality of regression tests.

Bradbury, Ted Clay. 4766: Radiation damping in classical electro-

Brădeanu, Petre. 793: Mouvements brachystochrones des fusées.

Bradley, Ralph A. 715: (with Gart, John J.) The asymptotic properties of ML estimators when sampling from associated populations.

Braess, Dietrich. 755: Die Konstruktion monotoner Iterationsfolgen zur Lösungseinschliessung bei linearen Gleichungssystemen.

Brahana, Thomas R. 5514: On a class of isotopy invariants.
Brainerd, Barren. 5386: On the structure of averaging operators.

Bramble, J. H. 4677: (with Payne, L. E.) On some new continuation formulas and uniqueness theorems in the theory of elasticity.

Brameret, Marie-Paule. 2146: Sur les demi-groupes d'homomorphismes. Brans, C. H. 4906: Mach's principle and a relativistic theory of gravitation, II.

Bransden, B. H. 3737: (with Moffat, J. W.) On the consistency of the coupled S and P-wave solutions in pion-pion scattering.

Bratkovskii, Ju. G. 268: Some questions on the qualitative theory of

algebraic differential systems in the small and in the large

Bratuhin, Ju. K. 3660: On the evaluation of the critical Revnolds number for the flow of fluid between two rotating spherical surfaces. Brauer, Alfred. 46: (with Shockley, James E.) On Diophantine equations of the form  $x^n + y^n = hp^m$ .

Brauer, Richard. 1219: (with Leonard, Henry S., Jr.) On finite groups with an abelian Sylow group. 3998: On groups of even order with an abelian 2-Sylow subgroup.

Brauner, H. 2525: Eine einheitliche Erzeugung konstant gedrallter Strahlflächen. 4431; Eine Scherungsinvariante der Strahlflächen.

Breakwell, J. V. 681: Minimax tests for the rate of a Poisson process and the bias rate of a normal process.

Bredihina, E. A. 2383: On the approximation of almost periodic functions with bounded spectrum.

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Brenner, Howard. 1738: Effect of finite boundaries on the Stokes resistance of an arbitrary particle.

Brenner, J. L. 1177: Characteristic polynomials of special matrices. 5780: The equatorial orbit of a near-earth satellite.

Breny, H. 4582: Sur un point de la théorie des files d'attente.

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Briggs, Benjamin R. 4924: (with Spreiter, John R.) Theory of electrostatic fields in the ionosphere at polar and middle geomagnetic latitudes.

Briggs, F. E. A. 673: The influence of errors on the correlation of ratios. Briggs, W. E. 3011: The irrationality of y or of sets of similar constants. Brilla, J. 1694: Mixed boundary value problems of anisotropic plates. Brillinger, David R. 5576: Examples bearing on the definition of fiducial probability with a bibliography.

Brillouin, Leen. 1062: \*Science and information theory.

Briney, R. E. 3035: Intersection theory on quotients of algebraic varieties.

Briones, Florentino. 2356: Une nouvelle méthode pour calculer des alternantes au sens de Tchebychef.

Bris, N. I. 4247: On the Fourier method for a fourth-order differential equation containing a second time derivative.

Broadbent, T. A. A. 4982: Eric Harold Neville.

Brocher, Eric F. 886: On similar solutions for strong blast waves and their application to steady hypersonic flow.

Brodskii, A. M. 3768: (with Ivanenko, D. and Sokolik, H. A.) A new conception of the gravitational field. 5778: (with Ivanenko, D. and Sokolik, G. A.) A new treatment of the gravitational field.

Brody, E. J. 5516: On the fibred spaces of Seifert.

Bronstein, I. V. 2588: Dynamical systems without uniqueness as semigroups of non-single-valued mappings of a topological space.

Bretas, Anténie. 5684: Une solution élémentaire en théorie de Mis. Brouwer, Dirk. 5785: The use of canonical variables in celestial mechanics.

Browder, Felix E. 318: Functional analysis and partial differential equations. II.

- Browder, W. 3526: (with Thomas, E.) Axioms for the generalized Pontryagin cohomology operations.
- Brown, Arlen. 3147: On the Lebesgue convergence theorem.
- Brown, Arthur B. 4515: (with Abian, Alexander) A new fixed point theorem for continuous maps of the closed n-cell.
- Brown, Clifford C. 1890: On the passage to equilibrium of Gibbsian ensembles.
- Brown, David P. 930: (with Reed, Myril B.) Necessary and sufficient conditions for R-graph synthesis.
- Brown, E. 4796: (with Goedecke, G. H.) Variational principle for potential scattering.
- Brown, Edgar H., Jr. 1551: Cohomology theories. 5521: Nonexistence of low dimension relations between Stiefel-Whitney classes.
- Brown, Leon. 425: On non-linear equations in a complex Banach space.
  Brown, L. M. 2816: Analytic properties of n-point loops in perturbation theory.
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- Broyles, A. A. 3752: Probability distribution for classical fluids.
- Bruckner, A. M. 5452; (with Bruckner, J. B.) On  $L_{\pi}$  sets, the Hausdorff metric, and connectedness.
- Bruckner, J. B. 5452: (with Bruckner, A. M.) On L<sub>n</sub> sets, the Hausdorff metric, and connectedness.
- Bruhat, François. 4354: Distributions sur un groupe localement compact et applications à l'étude des représentations des groupes padiques. 5131: \*\dagge\text{Algèbres de Lie et groupes de Lie. Résumé des lecons.
- de Bruijn, Nicolaas Govert. 2463: Verallgemeinerte Riemannsche Sphären.
- Brumberg, V. A. 4913: Random initial conditions and random parameters in problems of celestial mechanics.
- Brunk, H. D. 2661: On the range of the difference between hypothetical distribution function and Pyke's modified empirical distribution function.
- Bruns, Günter. 34: On the representation of Boolean algebras.
- Brysk, Henry. 4791: New scattering approximation.
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- Buchdahl, H. A. 3771: On the gravitational field equations arising from the square of the Gaussian curvature. 4778: Entropy concept and ordering of states. I. 4779: (with Greve, W.) Entropy concept and ordering of states. II.
- Buchsbaum, David A. 3974: Homology in categories.
- Buckens, F. 1669: Un modèle mathématique de système à dissipation du type "structurel".
- Buckingham, M. J. 1897: (with Butler, S. T.) Energy loss of a fast ion in a plasma.
- Buckland, William R. 5560: (with Kendall, Maurice G.) \*A dictionary of statistical terms.
- Bucy, R. S. 4940: (with Follin, J. W., Jr.) Adaptive finite time filtering. Budak, B. M. 2714: On the method of lines for solving certain quasi-linear boundary-value problems of parabolic type with discontinuous data. 4643: (with Gorbunov, A. D.) Multipoint difference methods for the solution of the Cauchy problem for the equation y'=f(x, y).
- Budini, P. 1847: (with Weber, T.) Gauge invariance of form factors.
  Busckner, H. F. 410: (with Anselone, P. M.) On a difference-integral equation.
- Buehler, Robert J. 1446: On functions satisfying certain differential inequalities.
- Buharaev, R. G. 513a: Mapping of a biaxial space of straight lines onto a set of spheres of Lobačevskii space. 513b: Theory of congruences of a biaxial space. 513c: The theory of surfaces in a bi-affine
- Bukovies, Erieh. 4172: Natürliche Eigenwertprobleme bei gewöhnlichen Differentialgleichungen. 4653: Eine Bemerkung zur Methode von D. A. Baschkirow für die numerisch-graphische Lösung von Differentialgleichungen.
- Bullough, R. K. 2993: On homometric sets. I. Some general theorems. 4781: A molecular theory of electromagnetic wave propagation in two-component anisotropic polymer systems.

Bunke, Olaf. 2868: Neue Konfidenzintervalle für den Parameter der Binomialverteilung. Cal

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- Bunkin, F. V. 2873: On the theory of electromagnetic fluctuations in a nonequilibrium plasma.
- Buquet, A. 2705: Sur la détermination effective des points rationnels d'une cubique obtenus à partir d'un seul point de base.
- Burau, W. 3949: Untersuchungen zur Geometrie der projektiven Formen und Invariantentheorie. II. Invariante Bildungen von Formensystemen und Segresche Produkte projektiver Grundmannigfaltigkeiten. 5431: Mehrdimensionale projektive und höhere Geometrie.
- Burčuladze, T. V. 821: On some generalized potentials for anisotropic elastic bodies. 822: Asymptotic formulas for the eigenfunctions of certain boundary value problems in the vibration of an anisotropic elastic body.
- Bureau, F. J. 1373: Problems and methods in partial differential equations. 5295: The Cauchy problem for partial differential equations of the second order and the method of ascent.
- Burgess, C. E. 1540: Continua which have width zero.
- Burgess, D. C. J. 5117: (with McFadden, R.) Systems of ideals in partially ordered semigroups.
- Burggraf, O. R. 2760: The compressibility transformation and the turbulent-boundary-layer equations.
- Burkholder, D. L. 683: On the order structure of the set of sufficient subfields. 2426: Semi-Gaussian subspaces. 5537: (with Chow, Y. S.) Iterates of conditional expectation operators.
- Burmester, M. V. D. 5689: On the commutative non-associative division algebras of even order of L. E. Dickson.
- Burrill, Claude W. 2448: (with Blair, Robert L.) Direct decompositions of lattices of continuous functions.
- Burt, P. 4888: (with Wahlquist, Hugo D.) Spin and exchange corrections to plasma dispersion relations.
- Busbridge, I. W. 4917: On inhomogeneous stellar atmospheres. 5358: On solutions of Chandrasekhar's integral equation.
- Busemann, Herbert. 170: Areas in affine space. I, II. 171: Areas in affine spaces. III. The integral geometry of affine area. 3421: Convexity on Grassmann manifolds. 3440: ★The geometry of geodesics.
- Bushell, P. J. 3315: The analytic behaviour of the scattering amplitude.
  Buslaev, V. 2804: (with Fomin, V.) An inverse scattering problem for
  the one-dimensional Schrödinger equation on the entire axis. 5693:
  Formulas for the short-wave asymptotic behavior in the diffraction
  problem by convex bodies.
- Buskirk, James Van. See Van Buskirk, James.
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- Buti, B. 988: Plasma oscillations and Landau damping in a relativistic gas.
- Butkovskii, A. G. 4967: The maximum principle for optimum systems with distributed parameters.
- Butler, D. S. 5662: (with Greenspan, H. P.) On the expansion of a gas into vacuum.
- Butler, John B., Jr. 256: Perturbation of the continuous spectrum of systems of ordinary differential operators. 1710: On the perturbation series solution for the deflection of a semi-infinite vibrating bar on an elastic foundation.
- Butler, S. T. 1897: (with Buckingham, M. J.) Energy loss of a fast ion in a plasma.
- Butler, Terence. 5416: (with Martin, Abram V.) On a method of Courant for minimizing functionals.
- Butzer, P. L. 1290: On Dirichlet's problem for the half-space and the behavior of its solution on the boundary. 2155: Beziehungen zwischen den Riemannschen, Taylorschen und gewöhnlichen Ableitungen reellwertiger Funktionen.
- Byhovskii, E. B. 4724: On inadmissible viscosity matrices for the equations of the isothermal motion of a ges.
- Cabannes, Henri. 4866: Théorie cinétique des gaz ionisés étude des propriétés d'un courant ionique.

Cabibbo, N. 4804: (with Ferrari, E.) Quantum electrodynamics with | Dirac monopoles

Cahen, M. 1937: (with Debever, R.) Sur les Espaces-Temps, qui admettent un champ de vecteurs isotropes parallèles

Caianiello, E. R. 4876: (Editor) ★Lectures on the many-body problem. Cairns, S. S. 2513: Umschreibende Würfel von konvexen Körpern in euklidischen Räumen.

Čakalov, Vladimir. 1411: Moment theorems and their relation to positivity.

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Calais, Josette. 3110: Équivalences principales généralisées dans les demi-groupes.

Calcan, V. I. 3623: (with Pelecudi, Chr.) Mécanismes des courbes cycliques. Contribution à la synthèse des mécanismes des courbes cycliques. 4662: (with Pelecudi, Chr.) On the synthesis of mechanisms describing high order cyclic curves.

Calderén, A. P. 310: (with Zygmund, A.) Local properties of solutions of elliptic partial differential equations. 4243: (with Zygmund, A.) A note on local properties of solutions of elliptic differential equations.

Calenke, M. S. 1123: Proper unions and special subdirect sums in

Caljuk, Z. B. 296: (with Azbelev, N. V.) A remark on iteration methods for the solution of differential equations. 4321: (with Azbelev, N. V.) On integral inequalities. I.

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Camion, Paul. 3933: Sur une propriété de l'espace normé Ca et ses applications aux matrices unimodulaires.

Campanato, S. 1358: Proprietà di alcuni spazi di distribuzioni a valori vettoriali e loro applicazione. 3357: Il teorema di immersione di Sobolev per una classe di aperti non dotati della proprietà di cono. 4238: Sui problemi al contorno per sistemi di equazioni differenziali lineari del tipo dell'elasticità. II. 5413: Proprietà di taluni spazi di Banach connessi con la teoria dell'elasticità.

Campbell, Robert. 3204: Sur une propriété sommatoire des polynomes de Lommel.

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Cannon, J. R. 4263: A Cauchy problem for the wave equation for a space-like region.

Canobbio, E. 897: (with Croci, R.) Modulated beams in a plasma with a magnetic field.

Cantalupi, Gabriella. 2491: Alcune considerazioni sulla parte reale di una superficie algebrica generale reale.

Canter, David G. 5047: On sets of algebraic integers whose remaining

conjugates lie in the unit circle. Capella, Alphonse. 1006: Sur le tenseur impulsion-énergie du champ de gravitation. 1805: Sur la quantification du champ de gravitation.

zur Capellen, W. Meyer. See Meyer zur Capellen, W. Capen, Jack. 415: Asymptotic eigenfunctions and eigenvalues of a homogeneous integral equation.

Capriz, Gianfranco. 851: On the foundations of macroscopic theories of

Capurso, Michele. 1692: Sulla flessione delle piastre sottili in presenza

di carichi assiali. Caradonna, Gaetano. 5360: Sull'esistenza delle soluzioni per alcuni sistemi di equazioni integrodifferenziali.

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Čen', Cun-mo = Chen, Jung-mo.

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Cess, B. D. 992: (with Roidt, M.) An appropriate analysis of laminar magnetohydrodynamic flow in the entrance region of a flat duet.

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Channugam, J. 1861: (with Jenkins, G. M.) The estimation of slope when the errors are autocorrelated.

Chae, B. T. 4713: Motion of spherical gas bubbles in a viscous liquid at large Reynolds numbers.

Charap, J. M. 1842: (with Tausner, M. J.) The field theoretic definition of the nuclear potential. III.

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Costa de Beauregard, Olivier. 1867: Déduction de l'existence de notre "effet inertial de spin" à partir des postulats de la théorie de l'électron de Dirac. 1924: Le graviton de spins 2, 1 et 0, particule associée au champ gravitationnel asymétrique incluant les effets de spin.

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Damköhler, Wilhelm. 1467: Theorie des isoperimetrischen Problems

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Dantzig, George B. 1953: (with Wolfe, Philip) The decomposition algorithm for linear programs.

Danzer, L. 1488: (with Grünbaum, B.) Über zwei Probleme bezüglich konvexer Körper von P. Erdős und von V. L. Klee. Durchschnittseigenschaften n-dimensionaler Kugelfamilien.

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Darling, D. A. 592: Sur les théorèmes de Kolmogorov-Smirnov.

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Das, A. C. 714: On MVU estimates of parameters of a finite population based on varying probability samples.

Das, Anadijiban. 1931: A class of exact solutions of certain classical field equations in general relativity.

Das, M. N. 4614: (with Narasimham, V. L.) Construction of rotatable designs through balanced incomplete block designs.

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1636: (with Rabinowitz, Philip) Advances in orthonormalizing computation.

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Dean, W. R. 1739: (with Hurst, J. M.) Note on the motion of fluid in a curved pipe.

Dehever, R. 1937: (with Cahen, M.) Sur les Espaces-Temps, qui admettent un champ de vecteurs isotropes parallèles.

Debrunner, Hans. 562: Links of Brunnian type.

De Cani, John S. 3579: A queueing model for business students.

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Drell, ... D. 1857: (with Pratt, R. H.) Extrapolation to cuts and the scattering of electrons and positrons.

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Drummond, I. T. 4845: Analytic properties of partial differential crossmetions

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Dyhne, A. M. 1836: Adiabatic perturbation of discrete spectrum states. 1894: (with Rumer, Ju. B.) Thermodynamics of a plane Ising-Onsager dipole lattice.

Dynin, A. S. 4234: (with Agranovië, M. S.) General boundary-value problems for elliptic systems in higher-dimensional regions.

Dynkin, E. B. 2630: Brownian motion with killing measure  $\mu$  and velocity measure  $\nu$ . 4570: Transformations of Markov processes connected with additive functionals.

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Džavadov, M. G. 1375: Asymptotic behavior of the solution of a mixed problem for a fourth-order equation with small parameter and degenerating into a second-order hyperbolic equation.

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Dzjadyk, V. K. 2380: On a property of almost periodic polynomials.
Džrbaljan, M. M. 207: Expansions in rational functions with fixed poles. 4346: (with Martirosjan, R. M.) Theory of general kernel transformations.

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Edelen, Dominie G. B. 3776: On the continuation of orthogonal structure across surfaces of discontinuity in the momentum-energy tensor.

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Edgar, Hugh. 3667: On some diophantine equations  $y^2 = x^3 + k$  with no rational solutions.

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Egorev, I. P. 4472: Maximally mobile Einstein spaces with non-constant curvature.

Einspruch, Norman G. 923: (with Barlow, Carl A., Jr.) Scattering of a compressional wave by a prolate spheroid.

Eisen, M. 3832: Ideal theory and difference algebra. Eisenberg, E. 1106: Supports of a convex function.

Eisenbud, Leonard. 1873: (with Wigner, Eugene P.) \*\*Einführung in die Kernphysik.

Eisenhart, Luther P. 1929: The paths of rays of light in generalized general relativity of the nonsymmetric field  $V_4$ . 3498: Generalized Riemannian geometry. 5455:  $\bigstar$ Transformations of surfaces.

Eisenstein, J. C. 2852: (with Ambler, E. and Schooley, J. F.) Traces of products of angular momentum matrices.

Elandt, Regina C. 695: Exact and approximate power function of the non-parametric test of tendency.

Elbert, Donna D. 1686: (with Chandrasekhar, S.) The stability of viscous flow between rotating cylinders. II.

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Eigot, Calvin C. 2962: Decision problems of finite automata design and related arithmetics.

Éliasberg, G. M. 3766: Transport equation for a degenerate system of Fermi particles.

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Elizarov, V. P. 2095: The radical ring of quotients.

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England, A. H. 854: (with Green, A. E.) Steady-state thermoelasticity for initially stressed bodies.

Ennola, Veikko. 3037: Note on an equation in a finite field. 3082: On the conjugacy classes of the finite unitary groups.

Enthoven, Alain C. 1956: (with Arrow, Kenneth J.) Quasi-concave

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Epstein, D. B. A. 1201: A result on free products with amalgamation. 3544: (with Schwarzenberger, R. L. E.) Imbeddings of real projective spaces

Epstein, J. H. 1807: (with Epstein, S. T.) Some applications of hypervirial theorems to the calculation of average values

Epstein, S. T. 1807: (with Epstein, J. H.) Some applications of hypervirial theorems to the calculation of average values. 5714: A note on gauge theories of vector particles.

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Ericksen, J. L. 855: Hydrostatic theory of liquid crystals. 856: Poiseuille flow of certain anisotropic fluids.

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Estermann, T. 1127: A new application of the Hardy-Littlewood-Kloosterman method.

Intrinsic theory of tensors.

Etienne, J. 1787: Propagation des ondes à l'extérieur ou l'intérieur d'un cercle ou d'une sphère.

Etkin, Bernard. 1943: Longitudinal dynamics of a lifting vehicle in orbital flight.

Eum, Sang-Seup. 3491: On infinitesimal holomorphically projective transformations in recurrent Kaehlerian manifolds. 5486: Cor-rection: "On infinitesimal holomorphically projective transformations in recurrent Kaehlerian manifolds".

Evans, D. J. 4649: Note on the line over-relaxation factor for small

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Evans, J. P. 4100: (with Walsh, J. L.) Approximation by bounded analytic functions to functions represented by Dirichlet series.

Eve, J. 1997: (with Rushbrooke, G. S.) High-temperature Ising partition function and related noncrossing polygons for the simple cubic lattice.

Evens, Leonard. 1191: The cohomology ring of a finite group.

Everitt, W. N. 2261: Self-adjoint boundary value problems on finite intervals. 5220: Integrable-square solutions of ordinary differential equations. II.

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and bounded outside a circular cylinder. Ewald, Günter. 1477: Kennzeichnungen der projektiven dreidimen-sionalen Räume und nichtdesarguessehe räumliche Strukturen über beliebigen Ternärkörpern. 3407: Schwack projektive Räume über dreifachen Ternärkörpern.

Ewald, P. P. 2880: (with Bienenstock, A.) Structure theories in physical and in Fourier space.

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Fabri, E. 2795: (with Barsella, B.) Angular momenta in relativistic three-body systems.

Faddeev, D. K. 1232: \*Tables of basic unitary representations of Fedorov groups. 3601: (with Faddeeva, V. N.) Ill-conditioned systems of linear equations.

Faddeeva, V. N. 3601: (with Faddeev, D. K.) Ill-conditioned systems of linear equations.

Fadell, Edward. 4537: (with Neuwirth, Lee) Configuration spaces. 4538: Homotopy groups of configuration spaces and the string 4539: (with Van Buskirk, James) The braid problem of Dirac. groups of E2 and S2.

Faith, Carl. 2062: On Herstein's theorem concerning three fields. 5086: Zwei-Elemente-Erzeugung und Endlichkeit der Dimension von Divisionsalgebren.

Falgas, Maurice. 467a: Sur l'effectivité des séries de base de polynomes. 467b: Sur l'effectivité des séries de base de polynomes.

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Falkeff, D. 5745: The N-body problem.

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- Farahat, H. K. 3667: On the natural representation of the symmetric groups.
- Farrell, O. J. 296: (with Bolster, M. F.) On approximation by functions of lesser valence.
- Farrell, R. H. 633: Asymptotic renewal theorems in the absolutely continuous case. 687: Bounded length confidence intervals for the zero of a regression function. 5464: Dense algebras of functions in L<sub>n</sub>.
- Fáry, L. 84: Self-intersection of a sphere on a complex quadric.
- Fass, A. L. 1164: (with Amir-Moéz, A. R.) A model of quasi-Euclidean space.
- Faulders, C. R. 1794: Heat transfer in the laminar boundary layer with ablation of vapor of arbitrary molecular weight.
- Faure, Robert. 2300: Solutions périodiques de certains systèmes d'équations différentielles non linéaires dépendant d'un paramètre. 2301: Sur certaines solutions périodiques d'équations différentielles algébriques non résolues à coefficients périodiques: Existence et forms limite.
- Fava, France. 5477: Contributi allo studio delle varietà Riemanniane a connessione costante.
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  Fedjanin, V. K. 974: Dispersion relations for nucleon Compton effect.
- Federenko, R. P. 766: A relaxation method of solution of elliptic difference equations.
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- Federov, F. I. 3740: (with Bogus, A. A.) A covariant description of spin properties of particles and its application. 4753: (with Konstantinova, A. F.) Passage of light through plates of uniaxial optically active crystals belonging to axial classes. I. General solution. 4754: (with Konstantinova, A. F.) The passage of light through plates of uniaxial optically active crystals. II. Plates cut parallel to the optic axis.
- Federov, V. S. 2226: A generalization of a Cauchy-type integral in higher-dimensional space.
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- Feit, Walter. 3084: "A characterization of the simple groups 8L(2, 24," Correction.
- Fejes Toth, L. 3429: On the stability of a circle packing.
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  Feldmann, H. 1638: Ein hinreichendes Konvergenzkriterium und eine
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  Gleichungssystemen.
- Féliei, Neël. 4762: Singularités des champs électriques ionisés.
- Fell, J. M. G. 2573: A Hausdorff topology for the closed subsets of a locally compact non-Hausdorff space.
- Feller, E. H. 5081: (with Swokowski, E. W.) On ring extensions for completely primary noncommutative rings.
- Felsen, L. B. 1788: (with Marcinkowski, C. J.) Diffraction by a cylinder with a variable surface impedance.
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  Mathematik für Chemiker. Feodos'ev, V. I. 4685: (with Gabril'jane, A. G.) Axially-symmetric forms of equilibrium of an elastic spherical shell under uniformly distributed pressure.
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  3248: Relations entre les systèmes dynamiques à cycles-limites et les systèmes différentiels linéaires à valeurs propres.

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- de Fériet, J. Kampé. See Kampé de Fériet, J.
- Fermi, Enrico. 4975: \*Collected papers (note e memorie).
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- Ferrari, Carle. 880: Interferenza di un getto fluido laterale con una corrente ipersonica.
- Ferrari, E. 4804: (with Cabibbo, N.) Quantum electrodynamics with Dirac monopoles.
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- de Figueiredo, Rui Pacheco. 2291: \*Contribution to the theory of certain non-linear differential equations.
- Filipcsyński, Leszek. 4696: Scattering of a plane longitudinal wave on a free surface of a disc in solid medium.
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- Finch, P. D. 1951: Storage problems along a production line of continuous flow. 1583: On the busy period in the queueing system GI/G/1. 3589: The order cycle system of stock control. 4585: Some probability problems in inventory control. 5588: On the transient behavior of a queueing system with bulk service and finite capacity.
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- Finkelstein, David. 952: (with Jauch, Josef M.; Schiminovich, Samuel and Speiser, David) Foundations of quaternion quantum mechanics. 2769: (with Schmidt, George) Magnetically confined plasma with a Maxwellian core.
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- Fiorie, Giovanal. 1971: Aspetti topologici di alcune proprietà delle reti con raddrizzatori.
- Firey, William J. 3427: Mean cross-section measures of harmonic means of convex bodies. 4416: p-means of convex bodies.
- Fischer, J. 4637: (with Ciulli, I. and Ciulli, S.) On the extrapolation of the experimental scattering amplitude to the spectral function region.
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- weighted mean of two normal samples with unknown variance ratio.

  Filman, K. M. 5496: (with Sas'ko, G. M.) Some systems of functions forming quasi-power bases in spaces of analytic functions in the circle.
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- Fladt, K. 5434: Die ebenen Kollineationen in der hyperbolischen Geometrie.
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- Flinchbaugh, David E. 1905: (with Russek, Arnold and Sherman, Charles H.) Simple, analytic, atomic wave functions.
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- Flügge, Siegfried. 782: \*Lehrbuch der theoretischen Physik. Bd. I: Einführung. Elementare Mechanik und Kontinuumsphysik. 783: \*Lehrbuch der theoretischen Physik. Bd. III: Klassische Physik II. Das Maxwellsche Feld.
- Flügge, Wilhelm. 794: \* Statik und Dynamik der Schalen.
- Fock, Vladimir = Fok, Vladimir.

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- Fok, Vladimir. 5760: ★Theorie von Raum, Zeit und Gravitatica Follin, J. W., Jr. 4940: (with Buoy, R. S.) Adaptive finite time filter-
- Fomenko, O. M. 2042: Sur la répartition du module premier des nombres premiers à valeur du symbole de Legendre donnée. 5029: Quelques remarques sur la fonction de Jordan. 5030: Sur quelques propriétés des coefficients binomiaux.
- Fomenko, V. T. 4433: A study of the solutions of basic equations in surface theory. 5482: On the bending and single-valued definiteness of surfaces of positive curvature with boundary.
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- Fontana, Peter R. 1893: Symmetric expansion of one- and two-center Coulomb potentials. 1876: Theory of long-range interatomic forces. III. First-order interaction energies in the coupled representation.
- Föppi, Ludwig. 804: Die Grundlagen der Elastizitätstheorie. 1675:
  Der elastische Spannungszustand in einer durch eine Parabel
  begrangten ebenen Scheibe infolge Einzellast im Kerberund.
- begrenzten ebenen Scheibe infolge Einzellast im Kerbgrund.
  Ferbat, N. 2726: (with Huaux, A.) Sur une nouvelle application de la méthode de Rayleigh.
- Fort, M. K., Jr. 2580: One-to-one mappings onto the Cantor set.

- 4498: (Editor) \*Topology of 3-manifolds and related topics. 4568: Homogeneity of infinite products of manifolds with boundary.
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- Fox, R. H. 3519: (with Harrold, O. G.) The Wilder arcs. 3522:
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- Fexley, Eric. 777: Formulae corresponding to flip-flops.
- Fraboul, François. 5591: Un critère de stabilité pour l'intégration numérique des équations différentielles.
- Fradkin, D. M. 946: (with Good, R. H., Jr.) Tensor operator for electron polarization.
- Fradlin, B. N. 820: (with Sahnovs'kii, S. M.) Determination of displacements of a shallow shell acted on by an arbitrary load.
- v. Fragstein, C. 4755: Eine Bemerkung zu der Arbeit: "Die Prinzipien der Reversibilität und Reziprozität" von Herrn A. Vašiček in dieser Zeitschrift.
- di Francia, Giuliano Toraldo. See Toraldo di Francia, Giuliano.
- Francis, George C. 3663: (with O'Brien, Edward E.) A consequence of the zero fourth cumulant approximation.
- Francis, J. G. F. 744: The QR transformation, II.
- Francck, H.-J. 800: Zur Inversion ebener Spannungszustände.
- Frank, Evelyn. 3693: On continued fraction expansions for binomial quadratic surds.
- Frank, H. 4444: Construction of a differential geometry in a Lobatchevsky space by the method of exterior forms.
- Frank, William M. 1829: Convergence of perturbation expansions in cutoff meson theories. 1846: (with Bialynicki-Birula, I.) Convergence of the perturbation expansion in some models of the field theory. 1864: Chew-Low formalism for two nucleon-meson systems. 1865: (with Tubis, Arnold) Integral equation for static nuclear potential. 3769: (with Bialynicki-Birula, I.) Convergence of perturbation expansions in meson theories without vacuum polarization.
- Frankl', F. I. 3666: Certain existence and uniqueness questions in the theory of transonic flow.
- Franz, Gudrun. 1491: (with Barthel, Woldemar) Eine Verallgemeinerung des Busemannschen Satzes vom Brunn-Minkowskischen Typ.
- Franz, W. 2938: Die gegenwärtige Lage der Mathematik in der Sieht Nicolas Bourbakis.
- Frautschi, Steven C. 3697: (with Chew, Geoffrey, F. and Mandelstam, Stanley) Regge poles in π-π-scattering. 3728: (with Gell-Mann, M. and Zachariasen, F.) Experimental consequences of the hypothesis of Regge poles.
- Fréchet, Maurice. 1429: L'espace des courbes est-il un espace de Banach? 1430: L'espace dont chaque élément est une courbe n'est qu'un semi-espace de Banach. 2158: Sur la "raréfaction relative minimum" d'un ensemble de mesure nulle.
- Fredkin, D. R. 1859: (with Wannier, G. H.) Decoupling of Bloch bands in the presence of homogeneous fields.
- Freedman, David A. 612: Mixtures of Markov processes.
- Freeman, Herbert. 3621: On the encoding of arbitrary geometric configurations.
- Freiberger, W. 722: (with Rosenblatt, M. and Van Ness, J.) Regression analysis of vector-valued random processes.

  2930: An approximate method in signal detection.
- Freidlin, M. I. 2632: (with Blagoveščenskii, Ju. N.) Some properties of diffusion processes depending on a parameter. 5542: (with Tutubalin, V. N.) On the structure of the infinitesimal σ-algebra of a Gaussian process.
- Frenkiel, François N. 721: (with Kampé de Fériet, J.) Correlations and spectra for non-stationary random functions.

- Freud, Gésa. 2365: Über trigonometrische Approximation und Fouriersche Reihen.
- Preudenthal, Hans. 3394: Symplektische und metasymplektische Geometrien. 3395: Bericht über die Theorie der Rosenfeldschen elliptischen Ebenen. 3545: Die Fundamentalgruppe der Mannigfaltigkeit der Tangentialrichtungen einer geschlossenen Fläche.
   2807: ★ Exact logic.
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- Friedman, Avner. 330: Asymptotic behavior of solutions of parabolic equations of any order. 2315: On fundamental solutions of elliptic equations. 4262: The wave equation for differential forms. 5283: Mixed problems for hyperbolic systems.
- Friedman, Lawrence. 5798: (with Sasieni, Maurice and Yaspan, Arthur) Methoden und Probleme der Unternehmensforschung.
- Frieman, E. 3756: (with Pytte, A.) Electrostatic instabilities in alightly inhomogeneous plasmas.
- Frink, Orrin. 3869: Pseudo-complements in semi-lattices.
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- Frolik, Zdeněk. 1583: On approximation and uniform approximation of spaces. 5488: On almost realcompact spaces.
- Fronzial, Christian. 963: Analyticity of Wightman functions. 4841: (with Mahanthappa, Kalyana and Norton, Richard) Integral representation for a scattering amplitude with complex singularities.
- Frontera Marqués, Bartolomé. 3882: Construction of perspectivities in lattices of subsets.
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- Fuehs, Welfgang H. J. 2208: (with Edrei, Albert) Bounds for the number of deficient values of certain classes of meromorphic functions.
- Fuglede, Bent. 2223: Quasi-continuité des potentiels d'énergie finie par rapport à un noyau consistant. 2224: Caractérisation des noyaux consistants en théorie du potentiel. 4232: A priori inequalities connected with systems of partial differential equations.
- Fujii, Akihike. 4859: A doublet symmetry shared by strong and weak interactions.
- Pujii, Yasunori. 3700: Effective range theory of multichannel reactions in the chain approximation method.
- Fujimoto, Atsuo. 4459: On automorphisms of G-structures.
- Fujisaki, Genjire. 3922: On L-functions of simple algebras over the field of rational numbers.
- Fujita, 8. 1916: (with Abe, R.) Theory of transport coefficients. I. General theory and electrical conductivity of electron-phonon system. 1917: Theory of transport coefficients. II. Viscosity coefficients of quantum gases obeying the Boltzmann statistics. 3751: Equivalence between the two generalized master equations.
- Fujiwara, Shiro. 916: Optical properties of conic surfaces. I. Reflecting cone.
- Fuka, Jareslav. 4678: Das zweite Problem der ebenen Elastizitätstheorie für inkompressible Körper.
- Fuks, D. B. 571: On homotopy duality. 573: (with Svare, A. S.) On the homotopy theory of functors in the category of topological spaces.
- spaces.
  Fuksman, A. L. 5329: Local properties of certain approximation operators.
- Fulkersen, D. R. 1639: (with Wolfe, P.) An algorithm for scaling matrices. 1999: (with Ryser, H. J.) Widths and heights of (0, 1)matrices.

Fulks, W. 2385: (with Sather, J. O.) Asymptotics. II. Laplace's method for multiple integrals. G

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- Gagliardo, Emilio. 3368: Una struttura unitaria in diverse famiglie di spazi funzionali. Teoremi di compattezza e di chiusura.
- Gaier, Dieter. 189: (with Huckemann, Friedrich) Extremal problems for functions schlicht in an annulus.
- Gaillard, Pierre. 3653: Des oscillations tridimensionnelles dans un canal à houle. Calcul approché de la vitesse, de la pression et du rotationnel.
- Galsarjan, S. S. 4170: A proof of Galerkin's method for equations with a retarding argument.
- Gál, István S. 608: The Martin boundary.
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- Galindo, A. 967: (with Morales, A. and Nuñez-Lages, R.) Superselection principle and pure states of n-identical particles. 5716: On a class of perturbations in quantum field theory.
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- Gallagher, P. X. 4008: Group characters and commutators.
- Gallai, T. 3862: (with Milgram, A. N.) Verallgemeinerung eines graphentheoretischen Satzes von Rédei.
- Gallarati, Dionisio. 4447: Sulle  $V_4$  di  $S_8$  i cui spazi tangenti si appoggiano a piani assegnati.
- appoggiano a piani assegnati.

  Galletly, G. D. 4688: (with Kyner, W. T. and Moller, C. E.) Numerical
- methods and the bending of ellipsoidal shells.

  Gallone, S. 2849: Un metodo per la ricerca delle configurazioni di
- equilibrio nel modello a goccia.

  Gal'pern, S. A. 1364: The Cauchy problem for general systems of linear partial differential equations.
- Gamkrelidze, R. V. 1352: On sliding optimal states.
- Gammel, J. L. 1882: (with Baker, George A., Jr.; Hill, B. J. and Wills, John G.) Exact numerical solution of a three-body groundstate problem.
- Ganapathy Iyer, V. 1423: Presidential address. 4980: (with Narasinga Rao, A.) R. Vaidyanathaswamy (1894–1960).
- Gandy, R. O. 18: On the axiom of extensionality. II.
- Ganea, Tuder. 1557: Homotopically stable points. 2604: (with Berstein, L.) The category of a map and of a cohomology class. 4494: A note on ε-maps onto manifolds. 4535: (with Berstein, I.) On the homotopy-commutativity of suspensions.
- Gani, J. 1949: (with Pyke, R.) Inequalities for first emptiness probabilities of a dam with ordered inputs. 1969: The extinction of a bacterial colony by phages: a branching process with deterministic removals. 5559: A stochastic dam process with non-homogeneous Poisson inputs.
- Gapoškin, V. F. 396: The localization principle and  $\varphi(nx)$  systems.

0

- Garabedian, P. R. 309: Analyticity and reflection for plane elliptic systems.
- Garaïa, L. K. 3412: Generalization of Mutar's theorem for systems of integral curves of the Monge equation.
- Gårding, Lars. 2646: Limit theorems for certain random walks.

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- Gasapina, Umberto. 3937: Sulle sezioni spaziali delle varietà aritmeticamente normali ed aritmeticamente regolari. 3938: Sulle sezioni spaziali delle varietà aritmeticamente normali ed aritmeticamente regolari. II.
- Gaschütz, W. 2133: (with Fong, P.) A note on the modular representations of solvable groups.
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- Gauhman, V. A. 269: The geometry of a second order ordinary differential equation with respect to a conformal group of transformations in two variables.
- Gausschi, Walter. 1647: Numerical integration of ordinary differential equations based on trigonometric polynomials. 3059: On inverses of Vandermonde and confluent Vandermonde matrices.
- Gavelja, S. P. 2324: On solutions of elliptic systems of differential
- equations with higher-dimensional sets of singularities.

  Gaver, D. P., Jr. 4584: A waiting line with interrupted service, including
- Gavriljuk, V. T. 3600: (with Remez, E. Ja.) Élaboration de quelques procédés de calcul pour la construction approximative des solutions des problèmes tchebycheviens à paramètres entrant non linéairement.
- Gavrilov, M. I. 5216: A new method for investigating non-linear differential equations based on the theory of moments. 5217: The method of moments in the theory of non-linear differential equations.
- Gavurin, M. K. 1380: Nonlinear functional equations and continuous analogues of iteration methods. 4932: (with Rubinstein, G. S. and Surin, S. S.) On the optimal utilization of production resources in fulfillment of several types of jobs (Generalized transportation problem).
- Gazizov, B. G. 817: Bending and stability of multilayer plates.
- Geba, Kazimierz. 2606: Sur les groupes de cohomotopie dans les espaces de Banach. Constructions générales. 2607: (with Granas, Andrzej) Un théorème sur le prolongement de l'homotopie dans les espaces de Fréchet.
- Gécseg, F. 2136: A Schreier extension of groups with multiple operators.
  Geffrey, Jean. 4559: Localisation asymptotique du polyèdre d'appui d'un échantillon Laplacien à k dimensions.
- Gehring, F. W. 3166: Rings and quasiconformal mappings in space.
  4097: A remark on the moduli of rings.
  4098: Extremal length
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  4099: (with
  Vaisal, Jussi) On the geometric definition for quasiconformal
  mappings.
- Geidel'man, R. M. 509: Analytic congruences of straight lines in a three-dimensional binary non-Euclidean space. 4445: Foundations of the theory of families of subspaces in symplectic spaces.
- Geise, Gerhard. 520: Zu Sophus Lies ursprünglicher Begründung der Geraden-Kugel-Transformation.
- Geisser, Seymour. 644: (with Mantel, Nathan) Pairwise independence of jointly dependent variables.
- Gélard, Jacques. 3680: Potentiel et flux d'une distribution uniforme de charges sur une couche cylindrique minee et limitée.
- Gelbaum, B. R. 2406: Tensor products and related questions. 4025: Free topological groups.

- Gel'fand, I. M. 545: (with Graev, M. I.) Integral transformations connected with line complexes in a complex affine space. 1061: (with Cetlin, M. I.) Some control methods for complex systems.
- Gel'fer, S. A. 2202: A variational method in conformal mapping. Gel'fond, A. O. 5025: The solution of equations in integers.
- Gell-Mann, Murray. 1861: Symmetries of baryons and mesons, 1863: (with Udgaonkar, Bhalchandra M.) High-energy nuclear scattering and Regge poles. 3728: (with Frautschi, S. C. and Zachariasen, F.) Experimental consequences of the hypothesis of Regge poles. 3739: Factorization of coupling to Regge poles. 3738: (with Lévy, M.) The axial vector current in beta decay.
- Gel'man, A. E. 1426: Analysic solutions of essentially non-linear equations.
- Genčev, Todor. 364: On a theorem of R. Rado. 5167: (with Argirova, Tatjana) Über die Taylorsche Reihenentwicklungen der rationalen Funktionen.
- Gercenitein, M. E. 2891: Wave resonance of light and gravitational
- Gergely, Eugen. 2467: Problèmes de la géométrie des variétés ndimensionnelles dans les espaces séparables de Hilbert.
- Germain, Paul. 1751: (with Femain, Maurice) Détermination d'ailes en delta optimales à bord d'attaque sonique.
- Germansky, B. 2251: Über die extremalen Polynome eines durch zwei Knoten unterteilten Kreises.
- Geronimus, Ja. L. 4151: The relation between the order of growth of orthogonal polynomials and the character of the mass distribution.
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- Getoor, R. K. 694: First passage times for symmetric stable processes in space. 1581: (with Blumenthal, R. M.) The dimension of the set of zeros and the graph of a symmetric stable process. 5559: (with Blumenthal, R. M. and McKean, H. P., Jr.) Markov processes with identical hitting distributions.
- Geyer, B. 3710: (with Jäger, E.) Über verschiedene Definitionen der Kausalität.
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- Ghelardoni, G. 762: Valutazione numerica della soluzione del problema di Dirichlet sul rettangolo. 764: Sopra un nuovo procedimento per la valutazione dell'orrore nella soluzione del problema di Dirichlet sul rettangolo con i metodi alle differenze e con l'uso di un calcolatore elettronico.
- Gheorghiev, Gh. 857: Geometrische Betrachtungen bei nichtstationären Bewegungen von Flüssigkeiten.
- Gheorghiță, St. I. 858: Anwendungen einiger Randwertprobleme in der Strömungslehre.
- Ghezzo, Santuzza. 3876: Una caratterizzazione geometrica dei reticoli semimodulari.
- Ghika, Al. 5412: Opérateurs différentiels dans certains espaces localement convexes.
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- Ghurye, S. G. 657: (with Olkin, Ingram) A characterization of the multivariate normal distribution.
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Gil de Lamadrid, Jesús. 2412: On finite dimensional approximations of mappings in Banach spaces. 3143: Completion of seminormed spaces and the Daniell process of extending an integral.

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Gilliland, M. C. 3615: A mutually coupled finite difference operator for diffusion processes.

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Ginsburg, Seymour. 1990: (with Rose, Gene F.) A comparison of the work done by generalized sequential machines and Turing machines.

Ginzburg, A. 5018: (with Tamari, D.) Representation of multiplicative systems by families of binary relations. I.

Ginzburg, Ju. P. 4336: Projection in a Hilbert space with bilinear metric.

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Glasser, Gerald J. 588: Tchebycheff-type inequalities in terms of the mean deviation. 665: Estimators for the product of arithmetic means. 666: A distribution-free test of independence with a mample of paired observations.

Gleasen, Andrew M. 5408: (with Whitney, Hassler) The extension of linear functionals defined on H<sup>®</sup>.

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2704b: (with Derwidué, L.)

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Glotov, V. P. 5792: Coherent scattering of plane and spherical waves in deep-sea layers containing discrete inhomogeneities.

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Gnedenko, B. W. = Gnedenko, B. V.

Gnuni, V. C. 1700: (with Bagdasarjan, Z. E.) Resonance in forced nonlinear oscillations of laminated anisotropic shells. 2734: On the theory of dynamic stability of laminated anisotropic shells. 2735: (with Bagdasarjan, Z. E.) On the theory of dynamic stability of laminated anisotropic shells of revolution.

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A. P. Calderón-A. Zygmund dans  $L_2$ . II.

Godeaux, Lucien. 2494: Trois modèles bicanoniques de surfaces algébriques. 2499: Construction d'une variété algébrique à trois dimensions possédant une surface pentacanonique d'ordre zéro. 2500: Sur les surfaces de genres arithmétique et géométrique zéro dont le système bicanonique est irréductible. 2501: Sur les complexes linéaires contenant les tangentes à une courbe algébrique. 2502: Sur la construction de quelques surfaces et variétés algébriques. 2503: Construction d'une surface possédant une seule courbe canonique de genre trois. 2530: Sur les surfaces dont une arête du quadrilatère de Demoulin engendre une congruence W. Sur une surface liée à une suite de Laplace terminée dans les deux 2532: Sur certaines congruences W. 3411: Sur les points unis des homographies cycliques du plan. 3414: Sur la construction de certaines surfaces algébriques. 3449: Sur une suite de quadriques.

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2563: Sur un théorème de la géométrie différentielle globale.

3457: Sur les comitants algèbriques d'un objet de la connexion linéaire tensorielle.

4392: La relation d'équivalence et les objets géométriques.

4984: (svit Bielecki, A.; Krzyż, J. and Montel, Paul) Mieczysław Biernacki (30. III. 1891–21. XI. 1959).

Gol'berg, E. M. 2521: Bounds for the volume of an n-simplex in terms of the volume of its faces.

Gol'berg, P. A. 1211: Hall bases of certain classes of groups.

Gol'eman, F. M. 1636: Frequency theory of signal grouping on a background of correlated noise.

Goldberg, A. 1815: (with Bjorken, J. D.) A test of approximation methods in potential scattering.

Goldberg, K. 2073: The incidence equation  $AA^{T}=aA$ .

Goldberg, Samuel I. 534: (with Kobayashi, Shoshichi) The conformal transformation group of a compact Riemannian manifold. 2537: 
Curvature and homology. 3461: (with Kobayashi, Shoshichi)
The conformal transformation group of a compact Riemannian

manifold. 3482: (with Kobayashi, Shoshichi) The conformal transformation group of a compact homogeneous Riemannian manifold. 3486: Conformal maps of almost Kaehlerian manifolds.

Goldberg, Seymour. 5366: (with Kruse, A. H.) The existence of compact linear maps between Banach spaces. 5367: On Dixmier's theorems concerning conjugate spaces.

Gol'dberg, V. V. 3445: Conjugate nets with T1-pairs as pairs of axial

Goldberger, M. L. 3745: (with Blankenbecler, R. and Cook, L. F.) Is the photon an elementary particle?

Goldenberg, H. 397: The evaluation of inverse Laplace transforms without the aid of contour integration.

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Gol'dina, N. P. 2126: The subgroups of metabelian products of cyclic groups of order p.

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Gol'fand, Ju. A. 2796: The three-dimensional relativistic Schroedinger equation for the three-body problem.

Golinskii, B. L. 1406: Generalization of a theorem of Alexits and Zygmund and its local analogue. 2371: On a theorem of Hardy and Littlewood. 2437: Some local properties of functions of

Goled, E. S. 2110: Homologies of some local rings.

Gelomb, Solomon W. 1960: A mathematical theory of discrete classifica-

Gelovin, V. D. 3340: On the Riesz basis of exponential functions.

Gelevina, L. I. 1470: (with Jaglom, I. M.) \*Induction in geometry. Gelevkin, K. K. 444: (with Solonnikov, V. A.) Imbedding theorems for fractional spaces. 4347: On a property of the  $L_p$  norm as a function of p.

Gel'Stein, E. G. 371: An infinite-dimensional analogue of the linear programming problem and its applications to some problems in the theory of approximation. 372: The Chebyshev best approximation problem in the complex domain with supplementary conditions on the coefficients of the approximating polynomial. 2360: A general formulation of the best approximation problem.

Golubencev, O. M. 3629: Continuous method of analysis of transient phenomena.

Golubev, A. S. 843: Reflection of plane waves from a cylindrical defect. Golubev, V. A. 2022a: Groups of prime numbers. 2022b: Generalized number-theoretic functions and the distribution of groups of primes.

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Goluzina, E. G. 2180: On typically real functions with fixed second coefficient.

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Gongadze, R. 1137: On the representation of numbers by certain quadratic forms of four variables.

Good, I. J. 685: The multivariate saddlepoint method and chi-squared for the multinomial distribution. 686: Corrections to "Saddlepoint methods for the multinomial distributions". 1109a: A short proof of MacMahon's 'Master Theorem'. 1109b: Proofs of some 'binomial' identities by means of MacMahon's 'Master Theorem'.

Good, R. H., Jr. 945: (with Rose, M. E.) Uniqueness of the electron 946: (with Fradkin, D. M.) Tensor operator polarization operator. for electron polarization. 4807: Connection between displacement operators and integrals of motion for photons. 5705: (with Rose, M. E.) Relation between Foldy-Wouthuysen and Lorentz

Goodier, J. N. 1671: (with Timoshenko, S.) \*Theory of elasticity. Goodman, Leo A. 694: (with Madansky, Albert) Parameter-free and nonparametric tolerance limits: the exponential case.

Goodman, Ralph R. 5670: (with Stern, Raya) Reflection and transmission of sound by elastic spherical shells.

Goodner, Dwight B. 1246: An extension of a theorem of Darboux.

Gopalakrishnan, N. S. 109: (with Ramabhadran, N. and Sridharan, R.) A note on the dimension of modules and algebras.

Gorbatenko, S. A. 2307: On the stability of a nonlinear system of automatic control.

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Gorčakov, Ju. M. 3096: On primary factorizable groups.

Gorden, B. 21: Some identities in combinatorial analysis. 5005: Two new representations of the partition function.

Gordon, C. N. 5771: An alternative deduction from the Michelson-Morley experiment.

Górecki, H. 3605: (with Turowicz, A. B.) Sur la résolution des équations algébriques par la méthode de Euler.

Goren, Simon L. 2759: The instability of an annular thread of fluid. Gorenstein, Daniel. 118: On finite groups of the form ABA.

Gorin, E. A. 2464: Characteristics of the ring of all continuous functions on a bicompactum.

Gorjainov, A. S. 922: Diffraction of a plane electromagnetic wave propagated along the axis of a cone.

Gorjanov, A. S. = Gorjainov, A. S.

Gor'kev, L. I. 1949: (with Kantorovič, L. V.) Some functional equations that arise in analysing a single-product economic model.

Górski, J. 1293: On a property of the upper envelope of plurisub-3195: The Sochocki-Plemelj formula for the harmonic functions. functions of two complex variables. 4125: Remark on a certain theorem of H. J. Bremermann.

Goto, Morikuni. 3125: Note on a characterization of solvable Lie

Gotô, T. 4854: On the interaction of elementary particles in view of the extended particle model. I. 4855: On the interaction of elementary particles in view of the extended particle model. II. Covariant formulation.

Gottlieb, Peter. 2865: (with Kikuchi, Ryoichi) Path integral in irreversible statistical dynamics.

Gould, H. W. 2000: Some relations involving the finite harmonic series. 3201: Generalization of an integral formula of Bateman. 3333: A new convolution formula and some new orthogonal relations for inversion of series

Govindarajulu, Zakkula. 4590: Exact lower moments of order statistics in samples from the chi-distribution (1 d.f.). 4598: The reciprocal of the decapitated negative binomial variable.

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Grandet, Marthe. 2057: Sur les dérivés d'un ensemble d'entiers algébriques.

Grätzer, G. 2983: (with Schmidt, E. T.) On congruence lattices of lattices. 2984: (with Wonenburger, Maria J.) Some examples of complemented modular lattices.

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Gribben, R. J. 1735: The damping of an oscillating disk in helium II. 1736: The damping I. Behavior at small and large amplitudes. of an oscillating disk in helium II. II. Behavior for general amplitudes based on approximate solutions.

Gribov, V. N. 1862: (with Pomeranchuk, I. Ya.) Complex angular momenta and the relation between the cross sections of various processes at high energies. 2824: (with Danilov, G. S. and Djatlov, I. T.) Analytic properties of a square diagram with non-decaying masses. 3724: (with Ansel'm, A. A.; Danilov, G. S.; Djatlov, I. T. and Sehter, V. M.) On the maximum value of the coupling constant in field theory. 3729: (with Danilov, G. S. and Djatlov, I. T.) Analytic properties of the square diagram with decay man 3736: Possible asymptotic behavior of elastic scattering. 4849: Partial waves with complex orbital angular momenta and the asymptotic behavior of the scattering amplitude. 4850: (with Pomeranchuk, I. Ya.) Regge poles and Landau singularities.

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Grohman, D. M. 2270: Topological classification of neighborhoods of a singularity in n-space

Gröbner, W. 1292: Über die Darstellung von implizit gegebenen

Funktionen mittels Lie-Reihen und Verallgemeinerungen der Lagrangeschen Reihe.

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Groemer, Helmut. 2514: Zur Definition des Krümmungsradius kon-2515: Eine Kennzeichnende Eigenschaft der vexer Kurven. Kugel. 2516: Über die dichteste gitterförmige Lagerung kongruenter Tetraeder. 3430: Eine Ungleichung für die Dichte von Lagerungen konvexer Körper. 4421: Über die Lagerung von Punkten auf der Kugel. 5449: Ein Satz über konvexe Körper und deren Projektionen. 5454: Über Zerlegungen des Euklidischen Raumea

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Gromyko, V. P. 2121: Groups in which the number of distinct prime π-divisors of the order is equal to the number of classes of noninvariant #d-subgroups.

Groot, M. H. De. See DeGroot, M. H.

de Groot, S. R. 3754: (with Mazur, P.) Non-equilibrium thermodynamics.

Groote, R. De. See De Groote, R.

Grosjean, P. V. 4477: Les principes de la géométrie semi-métrique et quelques-unes de leurs applications. II.

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Grossmann, S. 4883: On quantum-mechanical ergodicity conditions in connection with averaging methods.

Grosswald, Emil. 2060: (with Bateman, Paul T.) Imaginary quadratic fields with unique factorization. 3155: (with Kurepa, Svetozar) A theorem on gap series. 3425: (with Asplund, E. and Grünbaum, B.) On a measure of asymmetry of convex bodies.

Grothendieck, A. 75: Sur une note de Mattuck-Tate.

Grötzsch, Herbert. 2595: Zur Theorie der diakreten Gebilde. 14. Mitteilung: Ein Kantensignierungssatz für Vierkantnetze auf der

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Gruden, M. 4767: Some properties of harmonic bivectors and their application to the theory of electromagnetic waves.

Gruenberg, K. W. 122: The upper central series in soluble groups. Grün, Otto. 5108: Beiträge zur Gruppentheorie. VIII. Beziehungen zwischen isomorphen Untergruppen einer endlichen Gruppe 6.

5109: Beiträge zur Gruppentheorie. IX.

Grünbaum, B. 482: (with Asplund, E.) On the geometry of Minkowski 1488: (with Danzer, L.) Über zwei Probleme bezüglich konvexer Körper von P. Erdős und von V. L. Klee. 2598: (with Motzkin, T. S.) Longest conjecture of H. Hadwiger. simple paths in polyhedral graphs. 3398: On a problem of L. Fejes-Toth. 3425: (with Asplund, E. and Grosswald, E.) On a measure of asymmetry of convex bodies. 5448: The dimension of intersections of convex sets.

Grušin, V. V. 4423: (with Palamodov, V. P.) On the maximal number of mutually disjoint, pairwise homeomorphic figures which can be 5278: A problem in the entire space for a packed in 3-space. certain class of partial differential equations.

Grużewska, H. Milicer. Ses Milicer Grużewska, H.

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Grzegorczyk, A. 3819: An example of two weak essentially undecidable 3820: A theory without recursive models. theories F and F\*. 4394: Axiometizability of geometry without points. Gubenko, V. S. 1682: (with Mossakova'kil, V. I.) New methods for solving

the problem of the pressure of a circular die on an elastic half-space. Guderley, K. G. 1750: \*The theory of transonic flow.

Gudivok, P. M. 3095: (with Berman, S. D.) Integral representations

of finite groups. Gudkev, D. A. 4410: On certain questions in the topology of plane

algebraic curves. de Guenin, Jacques. 1951: Optimum distribution of effort: An extension of the Koopman basic theory.

Guess, Arnold W. 2911: Poynting-Robertson effect for a spherical source of radiation.

Guggenheimer, H. 465: A simple proof of Frobenius's integration theorem. 2619: Saggi di topologia delle varietà complesse. I, II, III.

Gugaina, V. I. 2696: On the approximate calculation of real roots of polynomial matrices.

Guiaşu, Silviu. 94: Une formule du type Perron pour la représentation d'une fonction de matrice.

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dans les calculs de programmation dynamique.

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Guillemin, Ernst A. 932: \*Synthesis of passive networks. Theory and methods appropriate to the realization and approximation problems.

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Guiraud, Jean-Pierre. 883: Possibilités et limites actuelles de la théorie des écoulements hypersoniques. 4728: (with Fenain, Maurice) Résolution, par développements asymptotiques, de l'équation linéarisée régissant les écoulements autour d'obstacles tridimensionnels, en régime supersonique.

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 5193: On Cartan's theorems A and B in several complex

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Günzler, Hans. 4302: Entwicklungen nach Eigenfunktionen und allgemeine Fastperiodizität. II.

Gupta, Anadi Shankar. 3693: Laminar free convection flow of an electrically conducting fluid from a vertical plate with uniform surface heat flux and variable wall temperature in the presence of a magnetic field.

Gupta, Hansraj. 2054: On the partition of J-partite numbers.

Gupta, K. C. 3671: (with Kapur, J. N.) On the existence and uniqueness of flows behind stationary curved magnetogasdynamic shocks.

Gupta, R. K. 2395: On certain theorems in unilateral and bilateral operational calculus.

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Gurland, John. 676: (with Katti, S. K.) Efficiency of certain methods of estimation for the negative binomial and the Neyman type A distributions. 1604: (with Katti, S. K.) Some methods of estimation for the Poisson binomial distribution.

Gurm, H. S. 898: Radial oscillation of an infinite cylinder with a magnetic field parallel to its axis: two particular models. 4769: The radial oscillations of an infinite cylinder with a magnetic field along the axis.

Gusarova, R. S. 3257: Stability of the solution of the Cauchy problem for a system of linear partial differential equations.

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Guth, Eugene. 2794: New class of classical uncertainty relations giving uncertainty for long and certainty for short times.

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Zweiter Band: Der Reaktor im nichtstationären Betrieb.

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4689: Note on Green's function in anisotropic elasticity.

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Gyires, B. 1390: Über eine Anwendung der verallgemeinerten Toeplitzschen Formen.

Gyr, John. 5867: (with Rapoport, Anatol; Chammah, Albert and Dwyer, John) Three-person non-zero-sum nonnegotiable games.

Haag, R. 1834: (with Schroer, B.) Postulates of quantum field theory.
Haahti, H. 5471: (with Klemola, T.) Zur Theorie der vektorwertigen
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ter Haar, D. 4877: (with Parry, W. E.) On determining excitation energies from the poles of Green functions.

Haber, Seymour. 88: Two matrix eigenvalue inequalities.

Habetha, Klaus. 3185: Einige Konvexitätssätze für eine Klasse von Funktionen von 2n reellen Veränderlichen.

Habr, Jaroslav. 1942: Die Frequenzmethode zur Lösung des Transportproblems und verwandter linearer Programmierungsprobleme.

Hačatrjan, A. A. 819: On the calculation of a three-layer orthotropic shell.

Hačatrjan, I. 0. 3311: Weighted approximation of entire functions of zero degree by polynomials on the real axis.

Hadley, G. 1050: (with Whitin, T. M.) A family of inventory models.
Hadwiger, Hugo. 5421: Kleine Studie zur elementaren Stetigkeitsgeometrie.

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Hájek, Jaroslav. 1628: On linear estimation theory for an infinite number of observations.

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Hajnal, A. 5000: (with Erdős, P.) On a classification of denumerable order types and an application to the partition calculus. 5001: (with Erdős, P.) Some remarks concerning our paper "On the structure of set-mappings".—Non-existence of a two-valued σ-measure for the first uncountable inaccessible cardinal.

Haken, Wolfgang. 4519a: Theorie der Normalflächen. 4519c: Ein Verfahren zur Aufspaltung einer 3-Mannigfaltigkeit in irreduzible 3-Mannigfaltigkeiten.

Hakimi, S. L. 2931: Simultaneous flows through a communication network.

Halanai, A. = Halanay, Aristide.

Halanay, Aristide. 301: Asymptotic stability and small perturbations of periodic systems of differential equations with retarded argument. 1970: Un problème d'optimisation pour les systèmes aux différences.

Hale, Jack K. 1664: (with Stokes, Arnold P.) Some physical solutions of Dirac-type equations.
3239: (with Seifert, G.) Bounded and almost periodic solutions of singularly perturbed equations.
5224: On the behavior of the solutions of linear periodic differential systems near resonance points.
5225: On the stability of periodic solutions of weakly nonlinear periodic and autonomous differential systems.

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Halikev, M. K. 1386: Solution of a nonlinear parabolic equation. Hall, M. G. 1728: A theory for the core of a leading-edge vortex. Hall, Marshall, Jr. 4020: Current studies on combinatorial designs. 5112: On the lattice of normal subgroups of a group.

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af Hällström, Gunnar. 5179: A new approach to the first fundamental theorem on value distribution.

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Hansen, Walter. 2027: Zum Scholz-Brauerschen Problem.

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Hanson, M. A. 1955: A duality theorem in non-linear programming with non-linear constraints.

Hapaev, M. M. 1345: Asymptotic behavior in the neighborhood of an irregular singular point of the solutions of ordinary linear differential equations with small coefficients on the highest derivatives. 3296: Asymptotic expansions of hypergeometric and confluent hypergeometric functions.

Hapaljuk, A. P. 915: †On the theory of circular optical axes.

Harary, Frank. 1113: The maximum connectivity of a graph. 2977:
A graph theoretic approach to matrix inversion by partitioning.

Harasahal, V. H. 5233: The structure of solutions and the correctness of linear systems of differential equations with quasi-periodic coefficients.

Harasov, D. F. 1324: On the uniform convergence of series of eigenfunctions of certain differential operators. 1443: (with Hvedelidze, B. V.) Some remarks on the theory of singular integral equations with Cauchy kernel. 1459: Spectral theory of some linear operators depending meromorphically on a parameter. 2457: On the spectral theory of semi-bounded operators. 3374: On the spectrum

of completely continuous operators depending analytically on a parameter, in topological linear spaces.

Hardie, K. A. 4520: A generalization of the Hopf construction. 4521: Higher Whitehead products.

Harish-Chandra. 5067: (with Borel, Armand) Arithmetic subgroups of algebraic groups.

Harmon, Sidney M. 2198: Regular covering surfaces of Riemann

Harris, Bernard. 4593: Determining bounds on expected values of certain functions.

Harris, L. Dale. 1961: \*Introduction to feedback systems.

Harris, William A., Jr. 5248: Singular perturbation problems. 5249: Singular perturbations of two point boundary problems.

Harrison, E. R. 994: Stability of longitudinal electrostatic oscillations in plasmas of finite dimensions.

Harrold, O. G., Jr. 2592: Locally peripherally euclidean spaces are locally euclidean.

2593: Locally peripherally euclidean spaces are locally euclidean. II.

3519: (with Fox, R. H.) The Wilder arcs.

Harrop, Ronald. 1988: On the recursivity of finite sets. Harriladze, F. I. 393: Uniform convergence factors and uniform

summability.

Harter, H. Leon. 1603: Estimating the parameters of negative

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exponential populations from one or two order statistics.

Hartman, P. 4983: Aurel Wintner. 5253: On local homeomorphisms of Euclidean spaces.

Hartmanis, Juris. 28: Generalized partitions and lattice embedding theorems. 1975: On the state assignment problem for sequential machines. I. 5822: (with Stearns, R. E.) On the state assignment problem for sequential machines. II.

Härtter, Erich. 3020: Eine Verallgemeinerung des Basisbegriffs in der additiven Zahlentheorie. 3021: Eine Verallgemeinerung des Basisbegriffs in der additiven Zahlentheorie. II.

Harumi, Kasaburč. 826: (with Nomura, Yûkichi) Eigenvibration for the membrane between two eccentric circles.

Harvey, C. A. 5258: (with Lee, E. B.) On the uniqueness of time-optimal control for linear processes. 5259: Determining the switching criterion for time-optimal control.

Harwit, Martin. 1026: Can gravitational forces alone account for galaxy formation in a steady state universe? 1027: Can gravitational forces alone account for galaxy formation in a steady state universe? II. Bondi-Gold universe.

Harzheim, E. 2008: Über Permutationen von totalgeordneten Mengen. Hasegawa, Yôjirô. 2329: Strongly p-parabolic systems.

Haseltine, W. R. 2914: Passive damping of wobbling satellites: general stability theory and example.

Haskind, M. D. 4707: Theory of the resistance of ships moving through waves.

Hasse, Helmus. 2942: Kurt Hensels entscheidender Anstose zur Entdeckung des Lokal-Głobal-Prinzips. 3925: †Sulla generalizzazione di Leoppoldt dei numeri di Bernoulli e sua applicazione alla divisibilità del numero delle classi nei corpi numerici abeliani.

Hasse, Maria. 1653: Über die Behandlung graphen-theoretischer Probleme unter Verwendung der Matrizenrechnung.

Hasumi, Morisuke. 4377: Algebraic derivations in the field of Mikusiński's operators.

Hatakeyama, Yoji. 1513: (with Sasaki, Shigeo) On differentiable manifolds with certain structures which are closely related to almost contact structure. II. 4457: On the existence of Riemann metrics associated with a 2-form of rank 2r. 4458: (with Sasaki, S.) On differentiable manifolds with contact metric structures.

Hatori, Hirohisa. 4587: Some theorems in an extended renewal theory.

III. 4588: Some theorems in an extended renewal theory. IV.

Hatsopoulos, G. N. 934: (with Keenan, J. H.) A single axiom for classical thermodynamics.

Hatteri, Akie. 2558: On 3-dimensional elliptic space forms.

Hatteri, Akira. 1194: A foundation of torsion theory for modules over general rings.

Haupt, D. 5584: (with Reutter, F.) Zur Berechnung Jacobischer elliptischer Funktionen mittels elektronischer Rechenautomaten.

Haupt, Otto. 3499: Über ordnungshomogene Bogen im projektiven n-dimensionalen Raum bezüglich der Hyperebenen als Ordnungscharakteristiken. 4411: Untersuchungen zur M. Barnerschen Verallgemeinerung des Vierscheitelsatzes auf Raumkurven.

Hausdorff, Felix. 4999: ★Set theory.

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mi. ischer Häuser, Wilfried. 3648: Ein Verfahren zur Auffindung partikulärer Lösungen der hydrodynamischen Bewegungsgleichungen idealer Flüssigkeiten für erdfeste kartesische Koordinatensysteme.

Havel, Václav. 485: Über die konjugierten normalisierten Desargues'schen Konfigurationen. 3073: On the theory of semi-automorphisms of alternative fields.

Havin, V. P. 2425: On the space of bounded regular functions.

Havinson, S. Ja. 181: The radii of univalence, starlikeness and convexity of a class of analytic functions in multiply-connected domains. 182: The analytic capacity of sets related to the non-triviality of various classes of analytic functions, and on Schwarz's lemma in arbitrary domains. 183: On approximation with account taken of the size of the coefficients of the approximants. 2212: On the radius of holomorphy of functions inverse to functions which are analytic and bounded in multiply-connected regions.

Hayashi, Chikio. 1606: Theory of quantification and its examples. V. Hayashi, Elichi. 548: On the set of points which are not locally discrete. Hayashi, Yoshiaki. 1532: On countably paracompact topological spaces. Hayashi, Yeshie. 1779: On the theory of the electromagnetic field function. 2785: General analyses of the forced oscillations in a waveguide and in a cavity.

Hayasi, Nisiki. 4716: On semi-aimilar solutions of the unsteady quasitwo-dimensional incompressible laminar boundary-layer equations. 4717: On the approximate solution of the unsteady quasi-twodimensional incompressible laminar boundary-layer equations.

Hayes, Allan. 3099: Additive functionals on groups.

Hayes, Michael. 3638: (with Rivlin, Ronald S.) A note on the secular equation for Rayleigh waves.

Hayes, Wallace D. 1343: Stability of periodic solutions of general second-order equations.

Haynsworth, Emilie V. 3651: (with Draxin, Michael P.) Criteria for the reality of matrix eigenvalues

Hazen, E. M. 1084: Determination of the probability density for random processes in systems with non-linearities of piecewise-linear

Head, J. W. 3153: (with Fine, M.) A note on the convergence of multipoint Taylor's series.

Heading, J. 2279: Phase-integral methods. I. 4144: The Stokes phenomenon and the Whittaker function.

Healy, W. C., Jr. 716: Limits for a variance component with an exact confidence coefficient.

Hearne, K. 1656: (with Edels, H. and Young, A.) Numerical solutions of the Abel integral equation.

Heaslet, Max A. 998: (with Alksne, Alberta) Diffusion from a fixed surface with a concentration-dependent coefficient.

Heaten, Robert. 3075: Polynomial 3-cocycles over fields of characteristic p.

Heckscher, Stevens. 2469: Variable Orlicz spaces. 3348: Representations by modulars of certain norms on Banach function space

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Heinrich, Helmut. 4399: Eine Anwendung komplexer zyklischer Matrixen auf ein elementargeometrisches Problem

Heins, Maurice. 2191: The conformal mapping of Riemann surfaces. Heins, Erhard. 313: On certain nonlinear elliptic differential equations and univalent mappings. 2565: On Weyl's embedding problem.

Hejeman, Jan. 4488: Boundedness in uniform spaces and topological

Held, Michael. 2925: (with Karp, Richard M.) A dynamic programming approach to sequencing problems.

Heller, Alex. 1198: On the classification of filtered modules.

Homotopy invariants of chain complexes. 1222: (with Reiner, I.)
On groups with finitely many indecomposable integral representations. 3993: (with Reiner, I.) Representations of cyclic groups in rings of integers. I.

Helmberg, Gilbert. 4303: Zerlegungen des Mittelwertes fastperiodischer Funktionen. I. 5487: On convergence classes of sets.

Helms, L. L. 3541: (with Johnson, Guy) Class D supermartingales.

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Hély, Jean. 2893: Une généralisation nouvelle de la métrique de Schwarzschild.

Hempel, John. 3538: Construction of crientable 3-manifolds.

Hendry, A. W. 3734: On the analyticity of partial wave amplitudes for

unstable particles in perturbation theory.

Henin, F. 984: (with Prigogine, I.; Balescu, B. and Résibois, P.) On the dynamical derivation of equilibrium statistical mechanics. Henkin, Leon. 4985: Are logic and mathematics identical?

Henley, Ernest M. 1843: (with Thirring, Walter) ★Elementary quantum field theory.

Henney, Dagmar Renate. 3940: Quadratic set-valued functions.

Henrici, Peter. 91: Two remarks on the Kantorovich inequality. 1646: The propagation of round-off error in the numerical solution of initial value problems involving ordinary differential equations of the second order.

Henry, Desmond Paul. 3812: The truncation of truth-functional calculation.

Henze, Ernst. 5554: Räumlich homogene Irrfahrten im Gitter. I. Stationäre Irrfahrten. 5555: Räumlich homogene Irrfahrten im Gitter. II. Instationäre Irrfahrten.

Hepp, K. 1833: (with Jost, R.) Über die Matrixelemente des Translationsoperators. 4812: (with Araki, H. and Ruelle, D.) On the asymptotic behaviour of Wightman functions in space-like directions

Herman, Robert. 1636: (with Anderson, Robert L. and Prigogine, I.) On the statistical distribution function theory of traffic flow,

Hermann, Robert. 1519: On the existence of a fundamental domain for Riemannian transformation groups. 2554: Totally geodesic orbits of groups of isometries. 5523: On the differential geometry of foliations. 5524: The differential geometry of foliations. II.

Herrmann, Manfred. 1486: Eine Verallgemeinerung des Apollonischen 2492: Über ein Problem der abzählenden Geometrie. Problems. I. 2493: Über ein Problem der abzählenden Geometrie. II. 3410: Über ein Problem der abzählenden Geometrie. III.

Herstein, I. N. 3072: Lie and Jordan structures in simple, associative rings.

Herszberg, J. 3409: On certain types of isolated s-ple points on algebraic primals in S<sub>d</sub>.

Hertelendy, P. 2733: Displacement and strain-energy distribution in a longitudinally vibrating cylindrical red with a viscoelastic coating. Hertzig, David. 1157: The structure of Frobenius algebraic groups.

Hervé, R.-M. 3186: Recherches axiomatiques sur la théorie des fonctions surharmoniques et du potentiel.

Hers, C. S. 3015: On the number of lattice points in a convex set. Hess, John L. 1726: Calculation of potential flow about bodies of revolution having axes perpendicular to the free-stream direction.

Hessel, A. 1778: (with Marcuvitz, N. and Shmoys, J.) Scattering and guided waves at an interface between air and a compressible plasma. Hestenes, Magnus R. 456: Relative self-adjoint operators in Hilbert

1172: Relative hermitian matrices Higgins, Joseph. 1885: A note on the solution of the Fokker-Planck

equation for the harmonic oscillator. Higgins, P. J. 4009: Determinants for automorphisms of  $\Omega$ -groups.

Highleyman, W. H. 1632: Linear decision functions, with application to pattern recognition.

Higuti, Isao. 4627: A statistical study of random packing of unequal spheres.

Hijikata, Hiroaki. 42: On a game of Wythoff.

Hilbert, D. 4216: (with Courant, R.) \*Methods of mathematical physics. Vol. II: Partial differential equation

Hill, B. J. 1882: (with Baker, George A., Jr.; Gammel, J. L. and Wills, John G.) Exact numerical solution of a three-body ground-state

Hill, C. K. 4358: On the doubly infinite Hilbert matrix.

Hill, Paul. 3999: On the number of pure subgroups.

Hill, R. 844: Acceleration waves in solids. 4700: Constitutive laws and waves in rigid/plastic solids.

Hiller, Fritz. 258: (with Schmidt, Adam) Über ein Eigenwertproblem linearer Differentialoperatoren mit zwei Parametern.

Hillon, Pierre. 2831: (with Vigier, Jean-Pierre) Une seconde extension du formalisme de Utiyama. 2832: (with Vigier, Jean-Pierre) Les ondes associées à une structure interne des particules. 2833: (with Vigier, Jean-Pierre) Sur les équation d'ondes associées à la structure des bosons. 2834: (with Vigier, Jean-Pierre) Sur les équations d'ondes associées à la structure des fermions. 4861: Théorie quantique du rotateur relativiste. 5739: Théorie des particules élémentaires.

Hilten, P. J. 108: (with Eckmann, B.) Group-like structures in general categories. I. Multiplications and comultiplications. 2106: (with Ledermann, W.) Remark on the l.c.m. in a homological ringoid. 2111: (with Ledermann, W.) On the Jordan-Hölder theorem in homological monoids. 2943: Memorial tribute to J. H. C. Whitehead. 4536: Note on a theorem of Stasheff. 5096: The fundamental group as a functor.

Himič, I. V. 4835: (with Lomsadze, Yu. M. and Krivsky, I. Yu.) On a possible generalization of modern quantized field theory. 5721: (with Lomsadze, Yu. M. and Krivsky, I. Yu.) A consistently relativistically invariant formulation of the quantized probabilityamplitude field theory.

Hinčin, A. Ja. 4554: (with Gnedenko, F. W.) ★Elementare Einführung in die Wahrscheinlichkeitsrechnung.

Hinderer, Karl. 3154: \*\* Über die Häufigkeit von Potenzreihen mit vorgegebenen Singularitäten.

Hintikka, Jaakko. 2953: Modality and quantification.

Hiong, King-Lai. 3175: Inégalités relatives à une fonction méromorphe et à l'une de ses primitives. Applications.

Hirai, Masaichi. 929: Diversity effects in spaced-antenna reception of tropospheric scatter waves.

Hirai, Takeshi. 2146: On infinitesimal operators of irreducible representations of the Lorentz group of n-th order.

Hirasawa, Yoshikazu. 5272: On a uniqueness condition for solutions of the Dirichlet problem concerning a quasi-linear equation of elliptic type.

Hirokawa, Hiroshi. 392: On the absolute Cesaro summability of Fourier series.

Hironaka, Heisuke. 2618: An example of a non-Kählerian complex-

analytic deformation of Kählerian complex structures.

Hirschman, I. I., Jr. 5214: Variation diminishing transformations and

Sturm-Liouville systems.

Hirzebruch, F. 1155: \*\times Neue topologische Methoden in der algebraischen Geometrie. 2617: (with Atiyah, M. F.) Vector bundles and homogeneous spaces.

Hitotumatu, Sin. 3604: A method of successive approximation based on the expansion of second order.

Hlavatý, V. 1516: The holonomy group VI. Weyl space  $W_4$ . II. 3468: Rigid motion in a Riemannian space  $V_n$ . I. A recurrent  $V_n$ . 3469: Rigid motion in a Riemannian space  $V_n$ . II. A regular  $V_n$ . 3485: An almost complex space of order p and characteristic  $(n_1, \dots, n_n)$ .

Hlawks, Edmund. 3029: Funktionen von beschränkter Variation in der Theorie der Gleichverteilung.

Hmelevskil, I. L. 5616: On a problem of Chaplygin.

He, Tse-Hsiu. 1851: (with Hsien, Ding-Chang and Zollner, W.) Low energy integral equations for ww scattering.

He, Yu-Chi. 4215: A computational technique for optimal control problems with state variable constraint.

Hoare, C. A. R. 5609: Quicksort.

Hochschild, G. 107: (with Rosenberg, Alex) Operations on Tor and Ext. 3126: (with Kostant, B.) Differential forms and Lie algebra cohomology for algebraic linear groups. 5129: (with Mostow, G. D.) On the algebra of representative functions of an analytic group. 5130: (with Mostow, G. D.) Representations and representative functions of Lie groups. III.

Hochstadt, Harry. 1240: A stability criterion for Hill's equation. 4256: On a partial differential equation of mixed type with d'econtinuous coefficients. Hocking, J. G. 4514: (with Doyle, P. H.) A decomposition theorem for n-dimensional manifolds.

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Hodge, William. 3045: Differential forms in algebraic geometry.

Hodges, John H. 3036: Generalized weighted m-th power partitions over a finite field. 3947: A note on systems of matrix equations over a finite field. 5050: Some polynomial equations for determinants over a finite field.

Hodyko, Ju. V. 909: (with Anisimov, S. I.) Convective diffusion in a boundary layer with flow inside an angle.

Heeffding, Wassily. 1563: On sequences of sums of independent random vectors.

Hoehnke, Hans-Jürgen. 3966: Über spurenverträgliche Algebren.

Hoff, N. J. 3637: (with Nachbar, W.) The buckling of a free edge of an axially-compressed circular cylindrical shell.

Hoffman, A. J. 3857: (with Singleton, R. R.) On Moore graphs with diameters 2 and 3. 3861: On the exceptional case in a characterization of the arcs of a complete graph.

Hoffman, William C. 4768: An approximate full wave solution for low frequency electromagnetic waves in an unbounded magneto-ionic medium.

Hofmann, K.-D. 4998: Über Wechselwirkungen von Gravitation und elektromagnetischem Feld gemäss der allgemeinen Relativitätstheorie. 4908: Über die Gravitationswirkung der quellenfreien Poyntingschen Energieströmung.

Hofmann, Karl Heinrich. 2143: Connected abelian groups in compact loops. 4372: (with Wright, Fred B.) The automorphism group of certain function rings.

certain function rings.

Hefmann, Ludwig. 2524: Die Stellung der projektiven Geometrie im relativistischen Weltbild.

Hofsommer, D. J. 2231: (with Potters, M. L.) Table of Fourier coefficients of associated Legendre functions.

Hogg, Robert V. 642: (with Craig, Allen T.) ★Introduction to mathematical statistics.

Hoh, F. C. 1760: Scrow instability of a plasma column.

Höhler, G. 990: The polaron model.

Holden, J. T. 3646: Steady-state thermal stresses in an elastic sphere.
Holloway, J. Leith, Jr. 2683: Smoothing and filtering of time series and space fields.

Honda, M. 860: Theory of shear flow through a cascade.

Hongo, Eishi. 5138: A structure theory for semi-finite quasi-unitary algebras.

Hönl, H. 1928: (with Dehnen, H. and Westpfahl, K.) Über die Unabhängigkeit der Sommerfeldschen Feinstrukturkonstanten vom Gravitationsfeld. 4899a: (with Dehnen, H.) Zur Frage der Relativität der Rotationsbewegungen.

Hook, J. F. 1712: Green's functions for axially symmetric elastic waves in unbounded inhomogeneous media having constant velocity gradients. 5638: Contributions to a theory of separability of the vector wave equation of elasticity for inhomogeneous media.

Hopkins, Robert E. 913: Third-order and fifth-order analysis of the triplet.

Horák, Z. 840: (with Pacáková, I.) The theory of the spinning impact of imperfectly elastic bodies.

Hori, Ei-ichl. 2757: Unsteady boundary layers. II. Flow around a body with a fluctuating circulation. 2758: Unsteady boundary layers. III. Boundary layer on a circular cylinder in rotational oscillation.

Hori, Sholehi. 1825: An approach to a relativistic strong coupling theory.

Hörmander, Lars. 3265: Hypoelliptic convolution equations. 5379: On the range of convolution operators.

Horn, Alfred. 3941: Eigenvalues of sums of Hermitian matrices.

Herne, J. G., Jr. 2586a: Real commutative semigroups on the plane.

2586b: Real commutative semigroups on the plane. II. 2587:
One-parameter subgroups in semigroups in the plane. 5592:
Semigroups on a half-plane.

Horowits, I. M. 1882: Analysis and synthesis of linear systems with inputs satisfying certain bounding conditions.

Herwitz, L. P. 4228: (with Goldstine, H. H.) On a Hilbert space with nonassociative scalars. Hoshizaki, Norio. 5736: (with Machida, Shigeru) Two-nucleon potential with full recoil. II. Two-pion-exchange potential. Hosoi, So. 1980: The history of mathematics of Takakazu Seki.

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Hosokawa, Fujitsugu. 5510: (with Terasaka, Hidetaka) On the unknotted sphere  $S^2$  in  $E^4$ .

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associativity and bisymmetry on quasigroups.

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Hou, Tjan'-sjan. 3255: Stability for systems of homogeneous partial differential equations with constant coefficients. 3256: Stability for inhomogeneous systems of linear partial differential equations with constant coefficients.

Howie, J. M. 2139: Embedding theorems with amalgamation for semi-

Hristov, Hr. Ja. 419: The diffusion equation of isotropically scatter neutrons with uniform speed in the one-dimensional stationary

Hristow, W. K. 4555: \*\*Grundlagen der Wahrscheinlichkeitsrechnung, mathematischen Statistik und Methode der kleinsten Quadrate.

Hrustalev, A. F. 2788: On a certain boundary-value problem for Laplace's equation.

Hsiang, Fu Cheng. 1405: On a theorem of Fejér. 3303: On a theorem of Srivastava.

Hsien, Ding-Chang. 1851: (with Ho, Tso-Hsiu and Zollner, W.) Low energy integral equations for ww scattering. 2798: (with Cen', Cun-mo) Minimum number of partial waves in reactions in which there are several particles in the final state.

Hsu, C. S. 797: (with Naghdi, P. M.) On a representation of displacements in linear elasticity in terms of three stress functions. 4665: On a restricted class of coupled Hill's equations and some applica-

Hsu, Chen-Jung. 3459: Note on  $(\phi, \zeta, \eta)$ -structure. 4476: Remark on automorphisms in certain compact almost Hermitian spaces.

Hsü, Chin-shui. 535: A theorem on convex surfaces. 2085: Theorems on direct sums of modules.

Hsu, L. C. 2357: Approximation of non-bounded continuous functions by certain sequences of linear positive operators or polynomials.

Hsu, N. C. 5004: Note on certain combinatorial designs

Hu, Shih-hua. 2956: (with Loh, Chung-wan) Normal forms of general recursive functions.

Hu, Sze-Tsen. 574: Homotopy and isotopy properties of topological spaces. 2605: Fiberings of enveloping spaces. II.

Huaux, A. 1662: Sur une nouvelle application de la méthode de Rayleigh. 2726: (with Forbat, N.) Sur une nouvelle application de la méthode de Rayleigh.

Hubbard, Bert. 4631: Eigenvalues of the non-homogeneous rectangular membrane by finite difference methods. 4633: Bounds for eigenvalues of the free and fixed membrane by finite difference methods.

Huber, Heins. 189: Über den konformen Typus von Flächen im euklidischen Raum.

Hubig, Werner. 4895: On physical geometry.

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Hübner, G. 4960: Verwendung elektronischer Analogrechenmaschinen

für die Bildung von Korrelationsfunktionen.

Huckemann, Friedrich. 180: (with Gaier, Dieter) Extremal problems for functions schlicht in an annulus.

Hudson, J. A. 1947: Love waves in a heterogeneous medium.

Hudson, John F. P. 3677: Landau damping for non-Maxwellian

 Hughes, D. R. 2507: Some results on collineation groups.
 Hughes, J. B. 3624: A generalized Hamiltonian dynamics for relativistic particles with spin. I. 3625: A generalized Hamiltonian dynamics for relativistic particles with spin. II.

Hughes, W. F. 3675: (with Elco, R. A.) Magnetohydrodynamic lubrication flow between parallel rotating disks.

Hui, Y. Y. 5565: (with McGregor, J. R.) Limiting distributions associated with certain stochastic learning models.

Hulanicki, A. 5101: (with Świerczkowski, S.) On group operations other than xy or yx.

van de Hulst, H. C. 1017: (with Bilo, E. H.) Methods for computing the original orbits of comets.

Hunt, J. N. 3658: A note on instability at a viscous interface.

Hunter, R. P. 557: On one dimensional semigroups. 1235: Sur la position des c-ensembles dans les demi-groupes. 2589: Certain compact connected semigroups irreducible over a finite set. 4497: A remark on a decomposition space of Bing. 5503: (with Rothman, N. J.) Characters and cross sections for certain semigroups.

Hunziker, Walter. 1856: Regularitätseigenschaften der Streuamplitude

im Fall der Potentialstreuung. Huppert, Bertram. 3983: Scharf dreifach transitive Permutations-

Hurgin, Ja. I. 5695: (with Jakovlev, V. P.) \*Methods of the theory of entire functions in radiophysics, communication theory, and optics.

Hurst, J. M. 1739: (with Dean, W. R.) Note on the motion of fluid in a curved pipe.

Husemoller, Dale H. 187: Analytic maps between Riemann surfaces. 188: Ramified coverings of Riemann surfaces.

Hussain, S. Manzur. 97: Evaluation of determinant of 11th order in the theory of partitions.

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Hvedelidze, B. V. 1443: (with Harazov, D. F.) Some remarks on the theory of singular integral equations with Cauchy kernel.

Hylieraas, Egil A. 953: Uper die Darstellung von Spinoren.

Manuer, Hussain, S.

Iannuzzi, Mariagrafia. 5606: Una nuova dimostrazione della convergenza di un noto metodo iterativo per la risoluzione numerica delle equazioni differenziali alle derivate parziali di tipo ellittico.

Ibrahim, Shafik Asaad. 3054: Quasi-algebraic infinite matrices and Wedderburn's exposition for algebraic infinite matrices.

Ichijyo, Yoshihiro. 3470: On groups of special motions in a subspace of a Riemannian space.

Ichimaru, S. 1777: (with Pines, D. and Rostoker, N.) Observation of critical fluctuations associated with plasma-wave instabilities.

Ida, Masakuni. 4800: (with Maki, Kazumi) On vertical representation of Bethe-Salpeter amplitudes.

Idlis, G. M. 1020: (with Omarov, T. B.) The evolution of the orbits of widely separated binaries with corpuscular emission.

Iglehart, Donald L. 1047: (with Karlin, Samuel) Optimal policy for dynamic inventory process with nonstationary stochastic demands.

Ignaczak, Józef. 852: The development of the science of thermoelasticity in the years 1945-1960. 4702: (with Nowacki, Witold) The plane dynamic problem of thermoelasticity.

Ignat'ev, N. K. 1064: The energy spectrum of a signal derived as a result of scanning.

Ignat'eva, R. P. 1296: Imbedding of subgroups in finite groups.
Iguas, Jun-lehi. 5849: On Siegel modular forms of genus two.

Ihm, Peter. 1613: A further contribution to the numerical evaluation of certain multivariate normal integrals. 5195: A table of the normal integral with complex argument.

Hzuka, Kenzo. 3096: (with Nakayama, Tadasi) A remark on orthogonality relations in finite groups.

Ikeda, Masatoshi. 3956: Schiefkörper unendlichen Ranges über dem Zentrum.

Ikeda, Mineo. 1832: (with Miyachi, Yoshihiko) On the static and spherically symmetric solutions of the Yang-Mills field.

Ikeda, Nobuyuki. 5546: (with Watanabe, Shinzo) On some relations between the harmonic measure and the Lévy measure for a certain class of Markov proces

Ikegami, Teruo. 210: On Poisson integrals. 4069: A note on (E.R.) integral and Fourier series.

Ikoma, Kazuo. 3167: On a lemma of Schwarz for K-QC mappings. Il'in. A. M. 2328: (with Kalašnikov, A. S. and Oleinik, O. A.) Secondorder linear equations of parabolic type.

Il'in, V. A. 2321: (with Sismarev, I. A.) An eigenfunction problem for

the operator  $Lu = \operatorname{div}[p(x) \operatorname{grad} u] - g(x)u$  with discontinuous

Il'in, V. P. 157: Some integral inequalities and their applications in the theory of differentiable functions of several variables. 447: Approximation of functions in the spaces  $\widetilde{W}_{g}^{(l)}(D)$  and  $W_{g}^{(l)}(D)$  by continuously differentiable functions.

- differential equations with a parameter.
- Il'julin, A. A. 1713: On the postulate of plasticity.
- Imas, Carles. 2302: On linear periodic differential equations with small parameter.
- Imegwu, E. O. 4699: Combined plastic bending and torsion.
- Imhef, J. P. 655: Computing the distribution of quadratic forms in normal variables.
- Inaba, Eisi. 3932: On matrix equations for Galois extensions of fields with characteristic p.
- Inaba, Mitue. 5251: On the theory of differential equations in coordinated spaces.
- İnan, Mustafa. 805: The carry-over matrix in elastomechanics. 1687: On the hypotheses used in the theory of nonuniform torsion.
- Ineichen, Robert. 5561: \*Einführung in die elementare Statistik und Wahrscheinlichkeitsrechnung.
- Ingraham, R. L. 4801: Stochastic Lorentz observers and the divergences in quantum field theory.
- Ingram, W. H. 4072: The j-differential and its integral.
- Ingwerson, D. R. 2304: A modified Lyapunov method for nonlinear stability analysis.
- Inkson, R. H. E. 698: The analysis of a 32 × 22 factorial experiment with confounding.
- Inoue, Sakuji. 5389: On the distribution of the spectra of normal operators in Hilbert spaces.
- Inoue, Tutomu. 4864: (with Sugiyama, Akira) Theory of nuclear surface on the basis of the Fermi gas model.
- Ichvidov, I. S. 4337: Regular and projectively complete linear manifolds in spaces with a general Hermitian bilinear metric.
- Ionescu, V. 1727: (with Dumitrescu, D.) Über die Bewegung des unendlichen Überfallstrahls in senkrechter Ebene.
- Ionides, P. A. 1831: General equivalence theorem in vector field theory. Iosifescu, Marius. 3129: (with Marcus, Solomon) Sur un problème de
- P. Scherk, concernant la somme des carres de deux dérivées. Iring, R. 1361: (with Reuss, E. and Yang, C. S.) Some reflections on the relaxation of biharmonic differential equations in polar coordinates.
- Irwin, John M. 119a: (with Walker, Elbert A.) On N-high subgroups of Abelian groups. 119b: High subgroups of Abelian torsion groups.
- Isaac, Richard. 3569: Markov processes and unique stationary probability measures.
- Isaacsen, Eugene. 763: Error estimates for parabolic equations.
- van İsacker, J. 2682: Generalized harmonic analysis.
- Isaev, V. K. 4933: L. S. Pontryagin's maximum principle and optimal programming of rocket thrust.
- Isbell, J. R. 89: Infinite doubly stochastic matrices. 4487: Uniform neighborhood retracts.
- Ilčenko, I. M. 1681: (with Mahovikov, V. I.) Determination of stress in a space formed of an isotropic medium having a cylindrical cavity. Ise, Mikie. 5478: Theory of symmetric spaces. I, II.
- Iseki, Kanesiroo. 169a: On the curvature of parametric curves. 169b: On decomposition theorems of the Vallée-Poussin type in the geometry of parametric curves. 169e: On two properties of the curvature of continuous parametric curves. 4080: On the bend of continuous plane curves.
- Iséki, Kiyoshi. 3290: A theorem on existence of solution for functional 3885: (with Chikawa, K. and Kusakabe, T.) On a equations. problem by H. Steinhaus. 3886: (with Chikawa, K.; Kusakabe, T. and Shibamura, K.) Computation of cyclic parts of Steinhaus problem
- Ishiguro, Kazue. 5338: Über das Sa-Verfahren bei Fourier-Reihen.
- Ishihara, Shigeru. 2566: (with Tachibana, Shun-ichi) A note on holomorphically projective transformations of a Kählerian space with parallel Ricci tensor. 3466: On a tensor field  $\phi_i^*$  satisfying  $\phi^* = \pm I$ .
- Ishihara, Tadashige. 2444: On generalized Laplace transforms. 2445: On  $L^{(k)}$ -transform and the generalized Laplace transform. Ishil, Gero. 5573: (with Yamasaki, Mitsuru) A note on the testing of
- homogeneity of k binomial experiments based on the range.

  Isiwata, Takesi. 553: On the duality concerning Stone-Cech compactifications. 4482: On convergences of sequences of continuous functions.

- Hjaina, A. G. 3216: On the reduction of a system of ordinary linear | Ismagliev, R. S. 4174: Conditions for the semiboundedness and discreteness of the spectrum in the case of one-dimensional differential operators.
  - Israel, W. 4916: (with Trollope, R.) New possibilities for a unified field theory.
  - Ite, Neberu. 2118: On a class of doubly transitive permutation groups. 2119: (with Szép, J.) Über die Quasinormalteiler von endlichen Gruppen. 3982: On transitive simple permutation groups of degree 2p.
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- Ito, Ryuzo. 5702: (with Mizushina, Tokuro) Analysis of the unsteady state in the thermal diffusion cell.
- Itô, Seizô. 333: On diffusion equations. 603: A counterexample concerning separable stochastic process
- Ivanenko, D. 3768: (with Brodskii, A. M. and Sokolik, H. A.) A new conception of the gravitational field. 5778: (with Brodskil, A. M. and Sokolik, G. A.) A new treatment of the gravitational field.
- Ivanov, E. A. 5203: An addition theorem for elementary functions of spheroidal waves.
- Ivanev, T. F. 5623: Determination of periodic motions in conservative systems with one degree of freedom.
- Ivanev, V. K. 215: A uniqueness theorem for the inverse problem of the logarithmic potential for star-like sets. 216: The stability of the inverse problem of the logarithmic potential. 4357: On linear problems which are not well-posed.
- Ivanov, V. V. 1415: (with Karagodova, E. A.) Approximate solution of singular integral equations of convolution type by Galerkin's method. 1969: (with Karagodova, E. A. and Jadrenko, E. K.) Approximate methods of solution of the dynamic characteristics of objects of automatic control. 4111: Some properties of singular integrals.
- Ivanter, I. G. 1854: Determination of the  $K^+ \rightarrow 2\pi + \gamma$  decay amplitude from dispersion relations and unitarity.
- Ivash, E. V. 5782: (with Sweet, R. F.) Mass anisotropy and planetary motion.
- Iversen, Lloyd E. 802: (with Gundersen, Roy M.) Small deflections of non-uniform beams
- Ivlev, D. D. 848: (with Martynova, T. N.) On the calculation of compressibility in the theory of ideally plastic media.
- Ivlev, E. T. 504: Coordinate frames of submanifolds in the theory of pairs of complexes in  $P_3$ .
- Iwahashi, Ryosuke, 228: Modifications of analytic spaces.
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- Iwiński, T. 5219: The generalized equation of Riccati and their applications to the theory of linear differential equations.
- Iyengar, K. T. Sundara Raja. 801: Über den Spannungszustand in einem elastischen Halbstreifen.
- Iyer, P. V. Krishna. See Krishna Iyer, P. V.
- Iyer, V. Ganapathy. See Ganapathy Iyer, V.
- Izmallov, V. D. 2546: Two-dimensional surfaces in spaces with affine connection.
- Izumi, M. 1402: (with Izumi, S.) On some theorems on conjugate functions.
- Izumi, S. 1402: (with Izumi, M.) On some theorems on conjugate functions.
- Jablokov, V. A. 470: The variation of a triple and multiple integral with weaker conditions imposed on the arguments of the integrand.
- Jackson, H. L. W. 2780: (with Power, G.) The use of bounds in electrical problems involving anisotropic material.
- Jackson, James R. 1587: Waiting-time distributions for queues with dynamic prioriti
- Jackson, Lloyd K. 3267: (with Bohn, Elwood) The Liouville theorem for a quasi-linear elliptic partial differential equation.
- Jacobs, Konrad. 1968: Über Kanāle vom Dichtetypus.
- son, N. 3971: A coordinatization theorem for Jordan algebras. Jacobsthal, Ernst. 3026: Über Sequenzen ganzer Zahlen, von denen

keine zu n teilerfremd ist. IV. 3027: Über Sequenzen ganzer Zahlen, von denen keine zu n teilerfremd ist. V.

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- Jadrenke, E. K. 1969: (with Ivanov, V. V. and Karagodova, E. A.) Approximate methods of solution of the dynamic characteristics of objects of automatic control.
- Jäger, E. 3716: (with Geyer, B.) Über verschiedene Definitionen der
- Jaggi, R. K. 1767: On magnetohydrodynamic stability of a self-gravitating plasma.
- Jaglom, A. M. 4723: Some mathematical models generalizing the model of homogeneous and isotropic turbulence.
- Jaglom, I. M. 1470: (with Golovina, L. I.) ★Induction in geometry.
  Jahnin, B. M. 389: On the remainder terms of Fourier series expansions in Jacobi polynomials of functions whose rth derivatives satisfy a Lipschitz condition.
- Jain, Mahinder K. 1753: (with Agarwal, Jai P.) On the motion of viscoelastic electrically conducting liquid in the presence of a magnetic field. 4315: On integral transforms.
- Jain, S. K. 2081: On the existence of identity. 2082: On a ring satisfying a certain condition.
- Jaiswal, N. K. 1589: Time-dependent solution of the head-of-the-line priority queue. 3578: Preemptive resume priority queue.
- Jakovlev, G. N. 448: Boundary properties of functions of the class W<sub>g</sub><sup>(1)</sup> in regions with corners. 5695: (with Hurgin, Ja. I.)
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- Jakovleva, G. F. 4323: (with Minnik, V. P.) Conditions for the existence of periodic solutions of a class of systems of nonlinear integrodifferential equations.
- Jakubík, Ján. 1225: Direct decompositions of partially ordered groups. II. Jakubovič, V. A. 2303: Oscillatory properties of solutions of canonical equations. 3244: Conditions of unlimited stability for a certain linear second-order differential equation. 4168: On the radius of convergence in the small parameter method for linear differential equations with periodic coefficients. 5232: The structure of the functional space of complex canonical equations with periodic coefficients. 5236: On convexity properties of stability regions of linear Hamiltonian systems of differential equations with periodic coefficients.
- Jakubovskii, O. A. 1827: (with Jappa, Ju. A.) On certain parametric representations used in field theory.
- Jakubowski, Zbigniew Jerzy. 4088: Sur le maximum de la fonctionnelle  $|A_3 \alpha A_2|^2$  ( $0 \le \alpha < 1$ ) dans la famille de fonctions  $F_M$ .
- James, Alan T. 4155: Zonal polynomials of the real positive definite symmetric matrices.
- James, Ioan. 2603a: (with Thomas, Emery) On homotopy-commutativity. 2603b: (with Thomas, Emery) Homotopy-commutativity in rotation groups.
- Jan, Jean-Pierre. 4756: Effective electronic mass tensor, electrical conductivity, and Hall effect for spherical energy surfaces.
- Jancel, Raymond. 420: (with Kahan, Théo) Relations entre les diverses solutions de l'équation intégro-différentielle de Boltzmann.
- Janikowski, Józef. 3161: Méthode algébrique et équation de Löwner. Janiszewski, Zygmunt. 3803: \*Ouvres choisies.
- Jankiewicz, C. 2894: Über Erhaltungssätze die aus Euler-Lagrangeschen Gleichungen folgen. 3778: A system of equations for the components of the mass tensor in an exterior gravitational field. 3779: A proof of uniqueness of hydrodynamic mass tensor in an exterior gravitational field. 5646: A proof of the unicity of the
- mass-tensor of non-relativistic hydrodynamics.

  Janko, Zvonimir. 2122: Endliche Gruppen mit lauter nilpotenten zweitmaximalen Untergruppen.

  3085: Zur Theorie der einfachen Gruppen.
- Jankov, V. V. 995: Deformation of a conducting fluid sphere under the influence of a magnetic field.
- James, Aloysic. 1891: The master equation for the interference term and the approach to acmilling in quantum many hody systems.
- and the approach to equilibrium in quantum many-body systems.

  Jánossy, L. 3553: Überlegungen zu den Grundlagen der Wahrscheinlichkeitsrechnung.
- Janovskii, S. V. 1422: The regularization of complete integro-differential equations of convolution type.

- Janowski, W. 2185: Sur les valeurs extrémales du module de la dérivée des fonctions univalentes bornées.
- Jans, J. P. 1192: Duality in Noetherian rings.
- Jansing, J. 4958: Die optimale Einstellung des Reglers bei Einwirkung von stochastischen Störgrössen (Untersuchungen am Analogrechner).
- Jappa, Ju. A. 1827: (with Jakubovskii, O. A.) On certain parametric representations used in field theory.
- Jarnik, Jiří. 3206a: On some assumptions of the theorem on the continuous dependence on a parameter.

  3206b: On a certain modification of the theorem on the continuous dependence on a parameter.
- Jarominek, Vlasislav. 3236: The equivalence of the Routh-Hurwitz and the Markov stability criteria.
- Jarovic'kil, M. V. 1588: Vectorial simply-connected flows.
- Jauch, J. M. 943: (with Misra, B.) Supersymmetries and essential observables. 952: (with Finkelstein, David; Schiminovich, Samuel and Speiser, David) Foundations of quaternion quantum mechanics.
- Jawerowski, J. W. 568: A generalization of a continuous choice function theorem. 3532: Some remarks on Borsuk generalized cohomotopy groups. 4495: (with Saalfrank, C. W.) A characterization of contractible compact Hausdorff spaces.
- Jedryka, T. M. 1368: A generalized problem of Fourier for a normal parabolic equation. 1369: Sur un problème aux limites pour l'équation de la conductibilité.
- Jeffreys, Harold. 1019: On two methods of Brown and Shook.

  Small corrections in the theory of surface waves.
- Jeger, M. 5423: Elementargeometrische Sätze als Abbilder von Gruppenoperationen.
- penoperationen.

  Jenkins, G. M. 1601: (with Chanmugam, J.) The estimation of slope
- when the errors are autocorrelated.

  Jenkins, James A. 5172: The general coefficient theorem and its appli-
- Jenkins, T. R. 3360: (with McKnight, J. D., Jr.) Coherence classes of ideals in rings of continuous functions.
- Jensen, Chr. U. 2030: On the solvability of a certain class of non-Pellian equations. 3905: Über eine Klasse nicht-Pellscher
- Gleichungen.

  Jenssen, Osmund. 1698: Shallow hyperbolic paraboloidal shells.
- Jepsen, D. W. 4889: (with Wallis, R. F.) Effect of quartic anharmonicity on the infrared absorption of alkali halide crystals.
- Jeśmanowicz, L. 4280: On the  $C^{\alpha}|C^{\beta}$  convergence.
- Jiang, Jia-he. 4516: Essential fixed points of the multivalued mappings.
  Joffe, A. 696: (with Klotz, Jerome) Null distribution and Bahadur efficiency of the Hodges bivariate sign test.
- John, Fritz. 1673: Rotation and strain. 4760: The initial value problem for Maxwell's equations for two media separated by a plane.
- Johnson, D. G. 2010: (with Kist, J. E.) Prime ideals in vector lattices. 5082: On a representation theory for a class of Archimedean lattice-ordered rings.
- Johnson, Diane M. 3856: (with Dulmage, A. L. and Mendelsohn, N. S.)
  Connectivity and reducibility of graphs.
- Johnson, Guy. 5541: (with Helms, L. L.) Class D supermartingales.
- 'Johnson, H. H. 5125: A generalization of K. T. Chen's invariants for paths under transformation groups.
- Johnson, John L. 5676: (with Greene, John M.) Stability criterion for arbitrary hydromagnetic equilibria.
- Johnson, Kenneth. 955: Solution of the equations for the Green's functions of a two dimensional relativistic field theory. 2821: Canonical commutation relations for vector fields.
- Johnson, M. W., Jr. 396: On variational principles for non-Newtonian fluids.
- Johnson, N. L. 677: The folded normal distribution: accuracy of estimation by maximum likelihood. 2689: Estimation of sample size.
- Johnson, Selmer M. 1967: A new upper bound for error-correcting codes.
- Jehnsen, W. R. 1866: (with Deck, R. T.) Continuum Coulomb wave function. 2809: (with Carroll, C. O. and Mullin, C. J.) Radiative corrections to the Coulomb scattering asymmetry function.
- Johnstone, Henry W., Jr. 4986: (with Anderson, John M.) ★Natural deduction. The logical basis of axiom systems.
- Jenes, B. Frank, Jr. 3614: (with Douglas, Jim, Jr.) Numerical methods for integro-differential equations of parabolic and hyperbolic types.

- Jones, E. E. 1674: (with Adkins, J. E.) Perturbation problems in finite clasticity: perturbation of constraint conditions.
- Jenes, F. Burten. 2583: The cyclic connectivity of plane continua.
- Jones, G. Stephen. 5234: The existence of periodic solutions of  $f'(x) = -\alpha f(x-1)\{1+f(x)\}.$
- Jones, Richard H. 2686: Spectral analysis with regularly missed observations.
- Jengmans, F. 5212: (with Dubus, Yolande) Contribution à l'étude des systèmes différentiels linéaires à coefficients constants.
- Jónsson, Bjarni. 1117: (with Kiefer, James E.) Finite sublattices of a free lattice. 1118: Arithmetic properties of freely a-generated lattices. 3877: Representations of relatively complemented modular lattices.
- Jordan, Pascual. 1001: (with Kundt, Wolfgang) Geometrodynamik im Nullfall. Strenge Lösungen der Feldgleichungen der allgemeinen Relativitätatheorie. III.
- Jerdan, Thomas F. 4797: The quantum-mechanical scattering problem. 4798: The quantum-mechanical scattering problem. II. Multi-channel scattering.
- Joseph, A. W. 1614: Subsidiary sequences for solving Leser's leastsquares graduation equations.
- Joseph, D. D. 1775: (with Tao, L. N.) Fluid flow between porous rollers.
  Jost, R. 1833: (with Hepp, K.) Über die Matrixelemente des Translationsperators.
- Juberg, R. K. 3278: On the Dirichlet problem for certain higher order parabolic equations.
- Judin, M. D. 1564: A limit theorem for sums of dependent random variables.
- Judina, A. 8. 5199: Asymptotic expansions of cylindrical functions of two real variables.
- Judovič, V. I. 4236: Some estimates connected with integral operators and with solutions of elliptic equations.
- Jurchescu, Martin. 3164: A maximal Riemann surface.
- Just, Kurt. 4922: (with Kraus, Karl) Spherically symmetric models in relativistic and Newtonian cosmology.
- da Justa Medeiros, Luiz Adauto. See Adauto da Justa Medeiros, Luiz.
- Jûza, Miloslav. 5457: Ligne de striction sur une généralisation à plusieurs dimensions d'une surface réglée.
- Juzefovič, G. I. 2200: (with Pittel', B. G.) Construction of domains of dynamical instability for canonical systems with periodic coefficients.
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  Kac, I. S. 3232: (with Krein, M. G.) Criteria for the discreteness of the spectrum of a singular string.
  3626: On the genus of the spectrum of a singular string.
  4177: Two general theorems on the asymptotic behavior of spectral functions of pecond-order differential systems.
- Kaeser, C. 4843: (with Barton, G.) Some analytic properties of a decay amplitude with final state interactions. I. The vertex diagrams in  $K \rightarrow 3\pi$  decay.
- Kadanoff, Leo P. 1883: (with Martin, Paul C.) Theory of many-particle systems. II. Superconductivity.
- Kadee, M. I. 3342: Letter to the editor.
- Kadison, Richard V. 2459: States and representations. 3385: The trace in finite operator algebras.
- Kadyševskii, V. G. 4825: On the theory of quantization of space-time.
  Kagan, Ju. 1915: (with Maksimov, L.) Transport phenomena in a paramagnetic gas.
- Kagiwada, Harriet. 2711: (with Bellman, Richard and Kalaba, Robert)
  Orbit determination as a multi-point boundary-value problem and
  quasilinearization.
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- Kalın, Peter B. 4820: (with Dresden, M.) Field theories with persistent one particle states. I. General formalism.

- Kaigorodov, V. R. 3784: (with Petrov, A. Z. and Abdullin, V. N.)
  Classification of gravitational fields of general type in terms of the
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  Classification of gravitational fields of general type by the group of
  motions. I, II, III.
- Kaiser, Henry F. 4617: Scaling a simplex. 4618: (with Diokman, Kern) Sample and population score matrices and sample correlation matrices from an arbitrary population correlation matrix.
- Kajiwara, Jeji. 2228: Some results on Cousin-I domains over C<sup>3</sup>.
  2229: Some results on Cousin-I domains over C<sup>3</sup>. II. 4134: On the inholomorphic quantity of a region in C<sup>3</sup>. 4135: On the inholomorphic quantity of a region in a Stein manifold.
- Kakičev, V. A. 2399: On some Fredholm equations, solvable in terms of singular Cauchy integrals.
- Kakutani, Shizue. 3560: Spectral analysis of stationary Gaussian pro-
- Kalaba, Robert. 2719: (with Bellman, Richard and Kotkin, Bella) On a new approach to the computational solution of partial differential equations. 2711: (with Bellman, Richard and Kagiwada, Harriet) Orbit determination as a multi-point boundary-value problem and quasilinearization. 3220: (with Bellman, Richard and Vasudevan, R.) A note on perturbation series for the periods of solutions of nonlinear differential equations.
- Kalafati, P. D. 253: Oscillatory properties of the fundamental functions of third-order boundary-value problems.
- Kalašnikev, A. S. 2328: (with Il'in, A. M. and Oleïnik, O. A.) Second-order linear equations of parabolic type.
- Kalecki, M. 5531: Mechanistic model of a random phenomenon.
- Kalicin, Nikola St. 2913: On the rotation and the figure of celestial bodies.
- Kalinin, S. V. 2296a: On the stability of periodic motions in certain critical cases. 2296b: On the stability of periodic motions in the case of certain zero, pure imaginary roots and roots with negative real part.
- Kalisch, G. K. 4307: A functional analysis proof of Titchmarsh's theorem on convolution.
- Kaliski, Sylwester. 846: Dynamic non-steady-state problem of the anelastic rectangular parallelepiped. 847: Dynamic non-steadystate problem of an anelastic cylinder of finite length. 1715: Propagation of spherical plastic unloading wave in a body with rigid unloading characteristic. 2766: Rayleigh waves between perfectly conducting fluid and solid body in a magnetic field.
- Kalitzin, Nikola St. = Kalicin, Nikola St.
- Källén, Gunnar. 5717: The analyticity domain of the four-point func-
- Kallenberg, G. W. M. 2535: The osculating logarithmic spiral in plane hyperbolic geometry.
- Kalman, G. 2888: Liouville-equation in relativistic dynamics.
- Kalman, J. A. 2992: Equational completeness and families of sets closed under subtraction.
- Kalman, R. E. 2305: Canonical structure of linear dynamical systems.

  Kalnins, A. 1701: (with Naghdi, P. M.) On vibrations of elastic spherical shalls.
- Kamal, A. N. 3718: The pion-nucleon coupling constant.
- Kamefuchi, S. 962: (with O'Raifeartaigh, L. and Salam, Abdus) Change of variables and equivalence theorems in quantum field theories.
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- Kamenskii, G. A. 4203: (with Zverkin, A. M.; Norkin, S. B. and Él'agol'c, L. È.) Differential equations with deviating argument.
- Kampé de Fériet, J. 721: (with Frenkiel, François N.) Correlations and spectra for non-stationary random functions.

  4668: Statistical mechanics of continuous media.
- van Kampen, N. G. 985: Exact calculation of the fluctuation spectrum for a nonlinear model system.
- Kamynin, L. I. 4255: On the method of potentials for a parabolic equation with discontinuous coefficients.
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- Kanazawa, A. 4839: (with Sugawara, M.) N/D method.
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Kann, Edgar. 537: Bonnet's theorem in two-dimensional G-spaces

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Kanold, Hans-Joachim. 41: Über periodische multiplikative zahlentheoretische Funktionen. 3001: Über periodische zahlentheoretische Funktionen

Kanter, S. 4043: Über die Konstruktion überall stetiger, nirgends differenzierbarer Funktionen. I.

Kantorovič, L. V. 1949: (with Gor'kov, L. I.) Some functional equations that arise in analysing a single-product economic model.

Kantz, Giorgio. 1146: L'esame mediante la teoria dei gruppi della decomposizione dell'ideale primo infinito d'un corpo aritmetico col passaggio ad uno dei suoi sopracorpi.

Kanala, R. 2585: (with Lelek, A.) Heredity of the generalized theorem on three continua

Kaplan, I. G. 2846: The transformation matrix for the permutation group and the construction of coordinate wave functions for a multishell configuration.

Kaplan, Wilfred. 3249: The singularities of continuous functions and vector fields. 3336: ★Operational methods for linear systems.

Kaplansky, Irving. 1187: Decomposability of modules. Kapluzavič, Ja. S. 1333: Some properties of isoclines.

Kapur, J. N. 3671: (with Gupta, K. C.) On the existence and uniqueness of flows behind stationary curved magnetogasdynamic shocks.

Kar, K. C. 4900: Fallacies in Dirac method of linearising the relativistic Hazailtonian.

Earacuba, A. A. 2053: An analogue of Waring's problem. Distribution of fractional parts of polynomials of a special type.

Karadžić, Lazar. 2341: Certains résultats se rapportant aux séries à termes constants. 2342: Sur quelques procédés de sommabilité. 2343: Un théorème se rapportant aux séries semi-convergentes. 2344: Comportement asymptotique des restes de séries convergentes à termes positifs.

Karagodova, E. A. 1415: (with Ivanov, V. V.) Approximate solution of singular integral equations of convolution type by Galerkin's method. 1969: (with Ivanov, V. V. and Jadrenko, E. K.) Approximate methods of solution of the dynamic characteristics of objects of automatic control.

Karal, Frank C., Jr. 2753: (with Keller, Joseph B.) Surface wave excitation and propagation.

Karamyšev, F. I. 2332: A boundary-value problem for a system of

partial differential equations of mixed type.

Karanicoloff, Chr. 2972: Sur une représentation des nombres de Stirling dans une forme explicite.

Karapetjan, S. E. 510: Quadrics of congruences. 511: Transformation of a congruence by ruled surfaces. 4449: On the theory of congruence pairs.

Karasev, G. A. 3089: Factorization of certain classes of groups. Karasev, I. M. 238: Some new results related to the integration of the confluent hypergeometric equation. 4166: An operator method for integrating the hypergeometric equation.

Karasik, G. Ja. 295: On the preservation of a periodic solution in

the transition from a differential equation to a finite-difference

Karlikov, V. P. 895: (with Korobelnikov, V. P.) Disturbances in an electromagnetic field caused by shock waves under the influence of a sudden increase in conductivity. 4743: (with Korobelnikov, V. P.) On the interaction of strong explosion waves with an electromagnetic

Karlin, Samuel. 636: (with McGregor, James) Occupation time laws for birth and death processes. 1646: Stochastic models and optimal policy for selling an asset. 1047: (with Iglehart, Donald L.) Optimal policy for dynamic inventory process with nonstationary stochastic demands. 1591: (with McGregor, James) On a genetics model of Moran. 2249: (with McGregor, James L.) The Hahn polynomials, formulas and an application. 2250: (with McGregor,

James) Determinants of orthogonal polynomials. 2926: (with Carr, Charles R.) Prices and optimal inventory policy.

Karlson, Erik T. 5682: Motion of charged particles in an inhomogeneous magnetic field.

Karp, Richard M. 2925: (with Held, Michael) A dynamic programming approach to sequencing problems. 3800: Minimum-redundancy coding for the discrete noiseless channel.

J. Paul) Minimization over Boolean graphs.

4969: (with Roth,

Karpelevič, F. I. 4832: Horispherical radial parts of Laplace operators on symmetric spaces.

Karpov, K. A. 770: (with Kireyeva, I. Ye.) \*Tables of Weber functions. Vol. I.

Karush, Jack. 2639: On the Chapman-Kolmogorov equation.

Kaščeev, V. N. 1964: (with Krivoglaz, M. A.) The effect of anharmonism on the energy distribution of inelastically scattered neutrons. I. The case of a weak bond.

Kasch, Friedrich. 2035: (with Volkmann, Bodo) Metrische Sätze über transzendente Zahlen in P-adischen Körpern. II.

Kaschluhn, F. 2828: On local but non-causal current operators in S-matrix theories.

Kashiwamura, Shohei. 1889: Statistical dynamical behaviors of a onedimensional lattice with an isc -pic impurity.

Kas'janjuk, S. A. 205: (with Dundučenko, L. O.) Regular functions with positive real part in an ellipse. 4085: Some subclasses of convex and star-shaped conformal mappings of an annulus.

Kasriel, Robert H. 4496: A characterization of certain quasi-open mappings.

Kastler, D. 4802: Free fields and multilinear algebra over Hilbert

Kästner, Siegfried. 1511: ★Vektoren, Tensoren, Spinoren.

Katagiri, Masakazu. 4757: Flow formation in Couette motion in magnetohydrodynamics.

Katětov, M. 550: Characters and types of point sets.

Kate, Akikuni. 5063: (with Morikawa, Hisasi) A note on Hasse-Witt matrices of algebraic curves of positive characteristic p. Kato, Heizaemon. 1982: On the work of Takakazu Seki.

Kato, Tosie. 1453: Fractional powers of dissipative operators. 4367: (with Tanabe, Hiroki) On the abstract evolution equation.

Katti, S. K. 676: (with Gurland, John) Efficiency of certain methods of estimation for the negative binomial and the Neyman type A distri-1604: (with Gurland, John) Some methods of estimation for the Poisson binomial distribution.

Katurada, Yoshie. 1521: An extension problem of Hopf concerning global properties of closed surfaces and a congruence theorem in Riemannian spaces.

Katz, Amnen. 4867: The analytic structure of many-body perturbation theory. 4868: The analytic structure of many-body perturbation theory. 5742: On the convergence and analytic properties of the linked cluster expansion.

Katz, Jeseph. 1918: Les crochets de Poisson des contraintes du champ gravitationnel. 2902: Note sur le formalisme canonique de la théorie des champs à contraintes.

Katznelson, Yitzhak. 434: Sur un théorème de Kahane et Salem concernant les ensembles parfaits symétriques. 435: Calcul symbolique dans les algèbres homogènes.

Kaufman, Bruria. 3761: (with Lipkin, Harry J.) Momentum transfer to atoms bound in a crystal.

Kaufmann, A. 624: (with Cruon, R.) Temps d'attente dans une file avec arrivées suivant la loi de Poisson par "grappes". Kawada, Yukiyosi. 2058: On the theory of Iwasawa-Tate on adele

Kawada, Yutaka. 2096: On Köthe's problem concerning algebras for which every indecomposable module is cyclic. I. 2097; On Köthe's problem concerning algebras for which every indecomposable module is cyclic. II. 5084: On Köthe's problem concerning algebras for which every indecomposable module is cyclic. I.

Kawaguchi, Michiaki. 540: Sur les dérivées covariantes des g-exten-

Kawai, Mitsuji. 1874: The semi-classical model for the nuclear reactions at intermediate energies.

Kawai, Ryeichire. 222: On the construction of a holomorphic function in the neighbourhood of a critical point of a ramified domain.

Kawaia, Taisue. 4586: A theorem of renewal type.

Kawaira, M. P. 2851: (with Pathria, R. K.) Quantur: statistical mechanics of a many-body system with square-well interaction.

Kay, I. 4795: (with Moses, H. E.) The determination of the scattering potential from the spectral measure function. V. The Gelfand-Levitan equation for the three-dimensional scattering problem.

Kazarnovskii, M. V. 1818: (with Stepanov, A. V.) Theory of resonance scattering on atomic systems.

Keenan, J. H. 934: (with Hatsopoulos, G. N.) A single axiom for classical thermodynamics.

Keeping, E. S. 641: \*Introduction to statistical inference.

Kegel, Otto H. 114: (with Wall, Gordon E.) Zur Struktur endlicher Gruppen mit nicht-trivialer Partition. 116: Nicht-einfache Partitionen endlicher Gruppen.

Keilson, J. 625: (with Kooharian, A.) On the general time dependent queue with a single server. 4563: The use of Green's functions in the study of bounded random walks with application to queuing theory. 4583: Queues subject to service interruption.

Keisler, H. Jerome. 12: (with Charg, C. C.) Model theories with truth values in a uniform space.
 3816: Ultraproducts and elementary

olasson.

Keldys, Ljudmila. 1542: The imbedding in  $E^*$  and in  $E^{n+1}$  of certain monotone images of  $E^n$ .

Keller, Herbert B. 1704: (with Keller, Joseph B. and Reiss, Edward L.) Buckled states of circular plates.

Keller, J. B. 833: (with Tadjbakhsh, L.) Strongest columns and isoperimetric inequalities for eigenvalues. 919: (with Magiros, Demetrics G.) Diffraction by a semi-infinite screen with a rounded end. 1704: (with Keller, Herbert B. and Reiss, Edward L.) Buckled states of circular plates. 2753: (with Karal, Frank C., Jr.) Surface wave excitation and propagation. 3683: Wave propagation in random media. 3944: Factorization of matrices by least-squares.

Kellerer, Hans G. 4056: Zur Konvexität des Wertebereichs normaler Masse.

Kelly, R. E. 3654: The final approach to steady viscous flow near a stagnation point following a change in free stream velocity.

Kemeny, John G. 3563: (with Snell, J. Laurie) Potentials for denumerable Markov chains.

potential theory.

3797: (with Snell, J. Laurie) Mathematical models in the social sciences.

4867: (with Snell, J. Laurie) Potentials for denumerable Markov chains.

Kempthorne, Oscar. 700: (with Addelman, Sidney) Some main-effect plans and orthogonal arrays of strength two.

Kendall, David G. 1913: (with Mott, J. L.) The asymptotic distribution of the time-to-escape for comets strongly bound to the solar system. 2423: Simplexes and vector lattices.

Kendall, M. G. 476: \*A course in the geometry of n dimensions. 1622: Ranks and measures. 5560: (with Buckland, William R.) \*A dictionary of statistical terms.

Rennedy, J. 5730: (with Spearman, T. D.) Singularities in partial-wave amplitudes for two ingoing and two outgoing particles.

Kennedy, Maurice. 3561: A stochastic process associated with the ultraspherical polynomials.

Kent, Clement F. 3826: Constructive analogues of the group of permutations of the natural numbers.

Kerimov, M. K. 5419: On the theory of discontinuous variational problems with variable end-points in space. 5429: On the theory of the second variation for discontinuous variational problems in space.

Kerner, Edward H. 2901: Electromagnetism and gravitation: an actionat-a-distance confluence.

Kerner, Hans. 1296: Überlagerungen und Holomorphiehüllen.

Merr, Rey P. 2557: Scalar invariants and groups of motions in a  $V_a$  with positive definite metric tensor.

Kershaw, D. 775: (with Vajda, S.) The economics of dumping from electronic computers.

Kerstan, Johannes. 3874: Tensorielle Erweiterungen distributiver Verbände. 4491: Zur topologischen Invarianz der Hausdorffsehen Q<sup>(a)</sup>-Mengen. Kervaire, Michel A. 2608: A manifold which does not admit any differentiable structure.

Kerwin, Edward M., Jr. 5640: (with Ungar, Eric E.) Loss factors of viscoelastic systems in terms of energy concepts.

Kesava Menon, P. 1107: Certain Hadamard designs. 5306: Evaluation of a series.

Kesel'man, G. M. 430: A generalization of the notion of basis and of Bari's theorems on bases.

Keshava Murthy, K. 5659: The effect of viscosity and surface tension on the Taylor instability of the surface of a cavitation bubble.

Kesten, Harry. 1142: Some probabilistic theorems on Diophantine approximations.

1569: Occupation times for Markov and semi-Markov chains.

2055: (with Ciesielski, Z.) A limit theorem for the fractional parts of the sequence (24).

5553: (with Ornstein, D. and Spitzer, F.) A general property of random walk.

Keston, Jeanette F. 4463: (with Supnick, Fred) On the rational triangu-

lation of a circle.

Kevorkian, J. 2912: Uniformly valid asymptotic representation for all times of the motion of a satellite in the vicinity of the smaller body in the restricted three-body problem.

Khamrul, S. R. 4714: On the oscillation of a circular cylinder in a viscous liquid contained in a co-axial circular cylinder. 5657: On the slow steady rotation of a spheroid of small ellipticity in a viscous liquid.

Khatri, C. G. 653: A characterization of the inverse Gaussian distribution. 4594: Conditions for Wishartness and independence of second degree polynomials in a normal vector. 4696: Simultaneous confidence bounds connected with a general linear hypothesis. Khimitch, I. V. = Himiö, I. V.

Khuri, N. N. 972: A relativistic scattering model satisfying unitarity, crossing symmetry and analyticity.

Kiang, T. 5789: The effect of a resisting medium on elliptical orbits.

Kichenassamy, S. 2904: Sur le rôle des conditions d'isothermie dans la méthode du tenseur d'énergie pour l'obtention des équations du mouvement.

Kiefer, J. 701: Two more criteria equivalent to D-optimality of designs.
Kiefer, James E. 1117: (with Jónsson, Bjarni) Finite sublattices of a free lattice.

Kiel, A. 2874: Spin diffusion in inhomogeneously broadened systems.
Kiguradze, I. T. 278: The capability of certain solutions of ordinary differential equations to oscillate.

Kihlberg, A. 5746: A reformulation of the quantal N-particle problem by means of redundant coordinates.

Kijaško, A. M. 4686: (with Položii, G. M.) Application of p-analytical functions to the solution of boundary problems of the momenties shell theory.

Kijne, D. 5426: Construction geometries and construction fields.

Kikkawa, Keiji. 1828: Generalized Ward identities for vector boson field. 5715: (with Ezawa, H. and Umezawa, H.) Potential representation in quantum field theory.

Kikuchi, Ryoichi. 2864: Variational derivation of the steady state.

2865: (with Gottlieb, Peter) Path integral in irreversible statistical dynamics.

2867: Irreversible cooperative phenomena.

4572: Variation principle in stochastic Markovian processes.

Kilmister, C. W. 2718: A new look for Hamiltonian dynamics.

Kilpi, Yrjö. 3376: Zur Theorie der quantenmechanischen Vertauschungsrelationen.

Kim, E. I. 940: (with Balmuhanov, B. B.) The temperature distribution in a piecewise homogeneous semi-infinite plate.

Kimura, Toshici. 2810: On a fixation of gauge and true observables of Yang-Mills field.

Kindler, Evien. 4655: Simple algorithm for the programming of arithmetic expressions.

King-Hele, D. G. 1939: The contraction of satellite orbits under the influence of air drag. III. High-eccentricity orbits  $(0.2 \le e < 1)$ .

Kingman, J. F. C. 1584: The effect of queue discipline on waiting time variance.

2075: A convexity property of positive matrices.

4569: The ergodic behaviour of random walks.

Kinney, John R. 627: A transient discrete time queue with finite storage. Kinoshita, S. 1549: A note on the genus of a knot. 3116: On quasi translations in 3-space.

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- Kiprijanov, I. A. 156: Certain properties of fractional directional derivatives. 5411: On the complete continuity of imbedding operators in the space of fractionally differentiable functions.
- Kirchgässner, Klaus. 3661: Die Instabilität der Strömung zwischen zwei rotierenden Zylindern gegenüber Taylor-Wirbeln für beliebige Spaltbreiten.
- Kireyeva, L. Ye. 770: (with Karpov, K. A.) \*Tables of Weber functions. Vol. I.
- Kirillov, A. A. 3122: Infinite-dimensional representations of the complete matrix group. 5396: Unitary representations of nilpotent Lie groups.
- Kiriščiev, R. I. 4395: Geometric constructions in the Lobachevsky plane by means of lines and points. 4396: Geometric constructions with straightedge in the Lobatchevsky plane.
- Kirpičnikov, S. N. 2725: A potential-theoretic method of solving the problems of mechanics.
- Kirinic, D. A. 2811: Field theory with nonlocal interaction. I. Construction of the unitary S matrix. 4803: Cause of vanishing of the renormalized charge in the Lee model.
- Kiselev, P. Ja. 2214: Approximation of analytic functions by polynomials in a finite number of domains.
- Kish, Leslie. 2681: Efficient allocation of a multi-purpose sample.
- Kishimoto, Kazue. 1188: Some remarks on Cartan-Brauer-Hua
- Kist, J. 1436: Indecomposable maximal ideals of a partially ordered vector space. 2010: (with Johnson, D. G.) Prime ideals in vector Inttions
- Kister, J. M. 3528: A theo.em on infinite regular neighborhoods and an Explication to periodic maps on E. 3529: Questions on isotopies in manifolds. 5124 (with Mann, L. N.) Equivariant imbeddings of compact abelian Lie groups of transformations.
- Kisyński, Jan. 5285: Solutions généralisées du problème de Cauchy-Darboux pour l'équation  $\partial^2 z/\partial z \partial y = f(x, y, z, \partial z/\partial x, \partial z/\partial y)$ .
- Kitagawa, Tosio. 1619: Successive processes of statistical optimizing procedures.
- Kitamura, Shin-ichi. 4473: (with Matsumoto, Makoto) A special class
- of spherically symmetric space-times and their imbeddings.

  Kitbaljan, A. A. 3265: Expansion into biorthogonal systems of Volterra
- Kivéliovitch, M. 1568: Séries chronologiques: tests quantitatifs. 3028: Sur la distribution des différences des nombres premiers.
- Klapka, Jindřich. 928: Theory of propagation of transient phenomena in wave guides.
- Klaua, Dieter. 5002: \*Konstruktion ganzer, rationaler und reeller Ordinalzahlen und die diskontinuierliche Struktur der transfiniten
- Klauder, J. R. 2843: (with Leutwyler, H. and Schaer, J.) ya-ambiguity in the generally covariant spin affine connection.
- Klee, Victor. 1437: Corrections to "Leray-Schauder theory without local convexity". 2512: Polyhedral sections of convex bodies. 3345: A conjecture on weak compactness.
- Kleene, S. C. 4992: Herbrand-Gödel-style recursive functionals of finite types.
- Klein, A. 5743: Theory of normal Fermion systems.
- er, W. 202: Démonstration du théorème de Carathéodory par la méthode des points extrémaux.
- Kleinfeld, Erwin. 3965: Associator dependent rings. 5088: (with Kokoris, Louis A.) Flexible algebras of degree one.
- Kleinstein, Gdalla. 868: An approximate solution for the axisymmetric jet of a laminar compressible fluid.

  Kleisli, Heinrich. 5893: Homotopy theory in abelian categories.

  Klement, P. 2737: Theorie der elastisch-plastischen Zylinderschale.

- Klemola, T. 5471: (with Hashti, H.) Zur Theorie der vektorwertigen Differentialformen.
- Kleppner, Adam. 5132: The structure of some induced repre Klimer, G. P. 736a: (with Aliev, G. A.) Computer solution of a problem in the theory of queues by a Monte Carlo method. 736b: Simulation on electronic digital computers of a class of queueing systems.

- Klingen, Helmut. 2041: Über den arithmetischen Charakter der Fourierkoeffizienten von Modulformen.
- Klingenberg, Wilhelm. 2559: Über Riemannsche Mannigfaltigkeiten mit positiver Krümmung.
- Klingst, Anna. 746: Die Inversion grosser Matrizen mit Hilfe von elektronischen Rechenmaschinen.
- Klir, JiFi. 2933: Weight codes.
- Klock, T. 2920: (with de Wit, G. M.) Best linear and best linear unbiased
- index numbers. Ju. L. Kl. Kov see Klokous J.
  Klokous J. L. 200: A method for the solution of a limit boundary problem for an ordinary second-order differential equation.
- Klotz, A. H. 4817: Mie's electrodynamics without potentials Klotz, Jerome. 696: (with Joffe, A.) Null distribution and Bahadur efficiency of the Hodges bivariate sign test. 697: Nonparametric
- tests for scale. Klotz, Tilla. 185: Imbedding compact Riemann surfaces in 3-space.
- Kluczny, Czesław. 2284: Sur certaines familles de courbes en relation avec la théorie des équations différentielles ordinaires. I.
- Kluitenberg, G. A. 4763: Thermodynamical theory of elasticity and
- Kneissl, Max. 5796: \*Mathematische Geodäsie (Landesvermessung). Erste Hälfte: Die Figur der Erde und die geodätischen Bezugsflächen. Die Feldarbeiten bei der Haupttriangulation (Triangulation 5797: ★Mathematische Geodäsie (Landesvermessung). Zweite Hälfte: Die geodätischen Berechnungen auf der Kugel und auf dem Ellipsoid.
- Kneschke, A. 4669: (with Rüdiger, D.) Eine Erweiterung des Hamiltonschen Prinzips zur Integration mechanischer Anfangs-Randwert-
- Kneser, Martin. 3094: Approximationssätze für algebraische Gruppen. 3907: Darstellungsmasse indefiniter quadratischer Formen
- Knight, B. W., Jr. 1058: (with Block, H. D. and Rosenblatt, F.)
- Analysis of a four-layer series-coupled perceptron. II. Knight, Frank. 611: On the regularity of Markov processes. On the random walk and Brownian motion.
- Knjazev, P. N. 255: A completely continuous perturbation of the Hill equation on the half-line.
- Knopp, Marvin Isadore. 197: Construction of automorphic forms on H-groups and supplementary Fourier series. 3168: (with Lehner, Joseph) On complementary automorphic forms and supplementary 5184: Correction to "Construction of automorphic forms on H-groups and supplementary Fourier series".
- Knorr, G. 1754: Numerische integration der nichtlinearen Vlasov-Gleichung.
- Knowles, J. K. 798: On a class of oscillations in the finite-deformation theory of elasticity.
- Knudsen, W. C. 4750: Equations on fluid flow through porous mediaincompressible fluid of varying density.
- Ko, Chao. 3839: (with Erdős, P. and Rado, R.) Intersection theorems for systems of finite sets.
- Koba, Ziro. 3742: Statistical theory of multiple particle production with angular momentum conservation. 3743: Three pion wave functions
- Kobayashi, Sheshichi. 224: On Bergman metric and holomorphic convexity. 534: (with Goldberg, Samuel I.) The conformal transformation group of a compact Riemannian manifold. 1512: On characteristic classes defined by connections. 3481: (with Goldberg, Samuel I.) The conformal transformation group of a compact Riemannian manifold. 3482: (with Goldberg, Samuel I.) The conformal transformation group of a compact homogeneous Riemannian manifold. 4468: Homogeneous Riemannian manifolds of negative 5192: On complete Bergman metrics.
- Kobayashi, Teilehi. 4533: A generalization of Dold-Them's isomorphism theorem for the homotopy groups with coefficients.
- Kobeleva, N. I. 3193: The relation between the growth of an entire function of two complex variables and the distribution of singularities ociated function.
- Kobori, Akira. 1979: Mathematics in Japan. 4993: (with Sainouchi, Yoshikazu) On the Riemann's relation on open Riemann surfaces. Kobzarev, I. Ju. 2839: (with Okun', L. B. and Pomerančuk, I. Ja.)
- Electromagnetic interaction of a neutral vector meson. . .

Keçak, Cevdet. 784: Small oscillations of a heavy chain consisting of two homogeneous parts and fastened at two points.

Kočarjan, G. 8. 2362: On weighted best approximation by rational functions on the entire real axis.

Koch, R. J. 556: (with McAuley, L. F.) Semigroups on trees. (with Collins, H. S.) Regular 2-classes in measure semigroups.

Kechen, Simen. 1992: Ultraproducts in the theory of models.

Kochendörffer, Rudolf. 5078: \*Einführung in die Algebra.

Kodaira, Kunihike. 586: Differential geometry of a certain class of complex pseudo group structures. 3939: On compact analytic surfaces.

Kodama, Yukihire. 4532: Test spaces for homological dimension.

Koecher, Max. 232: Beiträge zu einer Reduktionstheorie in Positivitätebereichen. II.

Kogalovskii, S. R. 140: The multiplicative semigroups of rings.

Köhler, H. S. 1879: On the separation method for calculating the nuclear reaction matrix.

Kohls, Carl W. 5399: A representation theorem for transformations of rings of continuous functions.

Koiter, W. T. 5634: A consistent first approximation in the general theory of thin elastic shells.

Kokilasvill, V. M. 2369: Some remarks on Fourier coefficients and function classes.

Kokoris, Louis A. 1190: Flexible nilstable algebras. 5088: (with

Kleinfeld, Erwin) Flexible algebras of degree one.

Kolbenstvedt, H. 2817: (with Olsen, H.) Momentum-spin correlations in

photoelectric effect and in single quantum positron annihilation.

Kolberg, F. 5651: Der Strömungseinfluss auf den Wellenwiderstand von

Schiffen.

Kolesnikov, N. N. 3676: (with Linkin, V. M.) Particle interaction in non-

Kolesnikov, N. N. 3676: (with Linkin, V. M.) Particle interaction in nonlinear electrodynamics.

Koller, A. 4748: Zu den Gleichungen der Plasmadynamik.

Kolmogorov, A. N. 2763: A refinement of previous hypotheses concerning the local structure of turbulence in a viscous incompressible fluid at high Reynolds number.

Komar, Arthur. 1809: Indeterminate character of the reduction of the wave packet in quantum theory. 3679: (with Markov, M. A.) On a certain version of nonlocal electromagnetic field theory.

Komatu, Yûsaku. 2210: On angular derivative. 2211: On fractional angular derivative.

Komazawa, Tutomu. 1643: (with Taga, Yasushi) Some remarks on the solutions of algebraic equations based on the method for unitary transformations of the companion matrices.

Kondrat'ev, A. S. 4690: (with Ustinova, T. I.) Solution of a problem concerning oscillatory properties of the vibrations of longitudinally compressed rods.

**Kondrat'ev**, V. A. 5239: Oscillatory properties of solutions of the equation  $y^{(n)} + p(x)y = 0$ .

Kendurar', V. T. 2225: A method of expanding the potential of a rigid body into a series in terms of its higher-order moments of inertia.
2787: The translational-rotational motion of a satellite under the attraction of a planet and the sun.

König, Heinz. 5498: A theorem on topological maps.

Kenijn, H. S. 664: Identification and estimation in a simultaneous equations model with errors in the variables.

Kenisi, Gaku. 5718: The mass spectral condition and analytic properties of the vertex function.

Kenjulkov, A. A. 388: On the category and Borel type of certain sets of functions defined by the behavior of conjugate series. 3321: †The Borel type of certain sets of sequences associated with Fourier series.

Kononenko, V. O. 1344: A form of the Routh-Hurwitz criteria.

Konoplev, V. P. 4153: Polynomials orthogonal with respect to weight functions which are zero or infinite at isolated points of the interval of orthogonality.

Konstantinov, O. V. 5758: (with Perel', V. I.) A more precise determination of the kinetic coefficients of a plasma.

Konstantinova, A. F. 4753: (with Fedorov, F. I.) Passage of light through plates of uniaxial optically active crystals belonging to axial classes. I. General solution. 4754: (with Fedorov, F. I.) The

passage of light through plates of uniaxial optically active crystals.

II. Plates cut parallel to the optic axis.

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Kooharian, A. 625: (with Keilson, J.) On the general time dependent queue with a single server.

Kopal, Zdeněk. 733: \*Numerical acalysis: With emphasis on the application of numerical techniques to problems of infinitesimal calculus in single variable. 2909: (Editor) \*Advances in Astronomy and Astrophysics. Vol. I.

Kopp, V. G. 3439: Ruled surfaces obtained in connection with the study of certain curve families.

Korányi, Adam. 226; On some classes of analytic functions of several variables.

Korevaar, J. 2215: Approximation by polynomials whose zeros lie on a circle.

Korina, E. A. 3873: (with Pašenkov, V. V.) Bicompactness in lattices.
Korneičuk, N. P. 382: Linear methods of approximation of functions of a Lipschitz class.
2366: On the existence of a linear polynomial operator giving the best approximation on a class of functions.

Körner, Otte. 56: Über das Waringsche Problem in algebraischen Zahlkörpern. 3022: Über Mittelwerte trigonometrischer Summen und ihre Anwendung in algebraischen Zahlkörpern.

Körner, Willy. 781: Einsatz des Digitalrechenautomaten D 1-2 (VEB Funkwerk Dresden) bei der Bearbeitung von Matrizenproblemen.

Kornienko, Ju. V. 5273: Construction of an asymptotic solution of the wave equation with a small non-linearity for a waveguide.

Korobelnik, Ju. F. 1374: Analytic solutions of the Tricomi equation.

Korobeinikov, V. P. 895: (with Karlikov, V. P.) Disturbances in an electromagnetic field caused by shock waves under the influence of a sudden increase in conductivity. 4743: (with Karlikov, V. P.) On the interaction of strong explosion waves with an electromagnetic field.

Koroljuk, V. S. 3555: On the asymptotic distribution of the maximal deviations.

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Kostant, B. 3126: (with Hochschild, G.) Differential forms and Lie algebra cohomology for algebraic linear groups.

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Kotkin, Bella. 2710: (with Bellman, Richard and Kalaba, Robert) On a new approach to the computational solution of partial differential equations. Kotlarski, I. 5533: On groups of n independent random variables whose product follows the beta distribution.

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- Kotō, Satoshi. 3490: On harmonic tensors in an almost Tachibana space. 4475: (with Tachibana, Shun-ichi) On almost-analytic functions, tensors and invariant subspaces.
- Kotov, V. F. 2488: On the singularities of the disposition of Pascal lines. Kotzig, Anton. 2004: Construction of third-order Hamiltonian graphs. Kottocký, J. 3711: (with Cižek, J.) A remark on the general perturbation
- Koval'čik, I. M. 4267: On the representation of a solution of Cauchy's problem for a certain equation in a Banach space in the form of a continual integral.
- Kevancev, N. I. 506: The isometric mapping of the projective structure of a complex onto a space of constant curvature.
- Kövari, T. 3174: On the Borel exceptional values of lacunary integral functions.
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- Kowalski, Oldřich. 4400: Über einen Operator auf der Menge der Klassen ähnlicher Dreiecke.
- Kozai, Yoshihide. 5788: Teaseral harmonics of the gravitational potential of the earth as derived from satellite motions.
- Kozelka, Robert M. 1593: \*Elements of statistical inference.
- Kozin, F. 4626: (with Bogdanoff, J. L.) On the statistical analysis of the motion of some simple two-dimensional linear vehicles moving on a random track.
- Kozlov, M. S. 1983: (with Bodner, V. A.) On the dynamics of control systems which include inertial coordinate measuring devices.
- Koluhin, G. I. 3865: (with Ersov, A. P.) Estimates of the chromatic number of connected graphs.
- Krabbe, G. L. 438: Réfractions non-hilbertiennes d'une transformation symétrique bornée. 439: Generalized measures whose values are operators into an intermediate space. 5396: Sur la permanence spectrale.
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- Krammer, Gergely. 3428: Eine Bemerkung zur Ausfüllung und Überdeckung einer Kugel durch Kreise.
- Krapivin, V. F. 4644: (with Linkovskii, G. B.) An approximate solution of the equation  $y^{(n)} = F(x, y, y', \cdots, y^{(n-1)})$ . 4651: (with Linkovskii, G. B.) Numerical solution of an integro-differential equation with a quasi-linear operator and a generalized Volterra operator.
- Kraplin, M. A. 348: Entire and meromorphic solutions of a class of difference equations.
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- Krasil'nikov, V. N. 2754: On the solution of some boundary-contact problems of linear hydrodynamics.
- Krasnosel'skil, M. A. 2451: (with Bahtin, I. A. and Stecenko, V. Ja.)
  On the continuity of positive linear operators. 4171: (with
  Bakel'man, I. Ja.) A solvability criterion for the two-point boundaryvalue problem. 4265: (with Bakel'man, I. Ja.) Non-trivial solutions of the Dirichlet problem for equations with Monge-Ampère
  operator.
- Krasovskii, Ju. P. 1731: On the theory of steady-state waves of finite amplitude.
- Krasovskii, N. N. 298: On a smooth section of a dispersive dynamical system.

  299: On mean-square optimum stabilization at damped random perturbations.

  300: Optimal regulation in non-linear systems.

  1086: (with Lidskii, É. A.) Analytical design of controllers in stochastic systems with velocity-limited controlling action.

  1330: On the problem of existence of optimal trajectories.
- Kraus, H. 3634: Pressure stresses in multi-bore bodies.

- Kraus, Karl. 4907: Lorentzinvariante Gravitationstheorie. 4923: (with Just, Kurt) Spherically symmetric models in relativistic and Newtonian cosmology.
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  2446: On perturbation determinants and a trace formula for unitary and self-adjoint operators.

  2447: (with Birman, M. S.) On the theory of wave operators and scattering operators.

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  3370: (with Gohberg, I. C.) On the theory of triangular representations of non-selfadjoint operators.

  3371: (with Gohberg, I. C.) Volterra operators with imaginary component in one class or another.
- Krein, S. G. 4352: (with Semenov, E. M.) A scale of spaces. 5376: (with Petunin, Ju. I.) A relationship criterion for two Banach spaces.
- Kreines, M. A. 2353: (with Vostrecov, B. A.) Approximation of a plane wave by superpositions of plane waves with given directions.

  (with Vainštein, I.) Letter to the editor.
- Kreisel, G. 3838: The axiom of choice and the class of hyperarithmetic functions.
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- Kripke, Saul A. 3827: "Flexible" predicates of formal number theory.
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- Krishnamurthy, V. 2438: On the continuous endomorphisms in the spaces of certain classes of entire functions.
- Kristensen, Erik. 4074: (with Poulsen, Ebbe Thue and Reich, Edgar)

  A characterization of Riemann-integrability.
- Kristensen, Leif. 2601: On the cohomology of two-stage Postnikov systems. 4525: On the cohomology of two-stage Postnikov systems.
- Krivochéine, L. E. = Krivošein, L. E.
- Krivoglaz, M. A. 1994: (with Kaščeev, V. N.) The effect of anharmonism on the energy distribution of inelastically scattered neutrons. I. The case of a weak bond.
- Krivošein, L. E. 1421: (with Mangeron, D.) Approximation par les polynomes de Bernstein des solutions de certains problèmes à la frontière pour les équations intégrodifférentielles d'ordre supérieur. 4325: (with Mangeron, Demetrio) Sopra una classe di problemi al contorno per le equazioni integro-differenziali a derivate totali nel senso di Picone.
- Krivskii, I. Ju. 4835: (with Lomsadze, Yu. M. and Khimitch, I. V.) On a possible generalization of modern quantized field theory. 5721: (with Lomsadze, Yu. M. and Khimitch, I. V.) A consistently relativistically invariant formulation of the quantised probability-amplitude field theory.
- Krivsky, I. Yu. = Krivskii, I. Ju.
- Królikowski, Wejciech. 3744: General formalism obeying intrinsic exclusion principle. 4853: Search for a rotational symmetry of the universal Fermi interaction.
- Kronauer, Richard E. 1743: (with Abernathy, Frederick H.) The formation of vortex streets.
- Krotov, V. F. 474: The principal problem of the calculus of variations for the simplest functional on a set of discontinuous functions. 475: The absolute minimum of functionals on a set of functions with bounded derivative.
- Krull, Wolfgang. 2137: Ordnungsfunktionen und Bewertungen von Körpern.
- Kruppa, Erwin. 1481: Über Fokalflächen und Affinitäten im vierdimensionalen Raum.
- Kruse, A. H. 5366: (with Goldberg, Seymour) The existence of compact linear maps between Banach spaces.

Kruskal, William. 678: The coordinate-free approach to Gauss-Markov estimation, and its application to missing and extra observations.

Kružkov, S. N. 5289: (with Clorak, O. A.) Quasi imear parabolic secondorder equations with several independent variables.

Krylev, A. L. 4647: Medica what names of degrees of freedom for a certain class of problems in mathematical physics (difference schemes with conservation law).

Krylev, V. I. 3667: (with Bul'gina, L. T.) On the convergence of a quadrature process.

Krylanovskii, O. M. 1974: On the improvement of the dynamics of extremal control systems.

Krzywicki, A. 3455: (with Aronszajn, N. and Szarski, J.) A unique continuation theorem for exterior differential forms on Riemannian manifolds.

v. Krzywoblecki, M. Z. 2968: Special relativity—a particular energy formulation in Newtonian mechanics? 4912: Special relativity a particular energy formulation in Newtonian mechanics? II.

Krzyż, J. 2182: (with Bielecki, A. and Lewandowski, Z.) On typically-real functions with a pressigned second coefficient. 2183: On univalent functions with two pressigned values. 3166: On a problem of P. Montel. 4080: Distortion theorems for bounded convex functions. II. 4984: (with Bielecki, A.; Golab, S. and Montel, Paul) Mieczysław Biernacki (30. III. 1891–21. XI. 1959).

Kubiljus, I. P. 57: (with Linnik, Ju. V.) An arithmetic analogue of Brownian motion.

Kublanovskaja, V. N. 5588: Certain algorithms for the solution of the complete problem of eigenvalues.

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Ruezma, M. 1378: On the functional equation f(x+y)=f(x)+f(y). Kuhlmann, Norbers. 1295: Die Normalisierung komplexer Räume.

Kuhn, Harold W. 5862: (with Baumol, William J.) An approximative algorithm for the fixed-charges transportation problem.

Kuhn, P. 5043: Über ein Problem in der Theorie der Primzahlen.

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Kull', I. 3790: (with Landra, É.) A method of solving the generalized transportation problem.

Kumane-ge, Hitoshi. 4245: On the uniqueness of the solution of the Cauchy problem and the unique continuation theorem for elliptic equation.

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Kumar, Prem. 5663: On plane gas flows. 5668: Determination of the second derivatives of the flow parameters and torsion of the streamlines behind three-dimensional stationary shocks.

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Kundt, Wolfgang. 1001: (with Jordan, Pascual) Geometrodynamik im

Nullfall. Strenge Löungen der Feldgleichungen der allgemeinen Relativitätstheorie. III.

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L

Funktionenkörper. Künzi, Hans. 4929: La méthode Duoplex.

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**Kureps, Svetozar. 355:** On the functional equation f(x+y)=f(x)f(y)-g(x)g(y). 1448: On n-th roots of normal operators. 3155: (with Grosswald, Emil) A theorem on gap series.

Kurieyn, V. N. 1791: (with Grinberg, G. A.) Diffraction of a plane electromagnetic wave by an ideally conducting plane ring and the electrostatic problem for such a ring.

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Kurkjian, B. 2676: (with Zelen, M.) A calculus for factorial arrangements.

Kurlandzki, Jerzy. 825: A method for solving the vibration problem of the elastic cylinder and the elastic rectangular parallelepiped. 4691: The reduction of initial-boundary-value problems of elasticity to Fredholm integral equations of the second kind.

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Kuropatenko, V. F. 4731: A method of calculation for shock waves.

Kuroš, A. G. 5007: ★Lectures on general algebra.

Kuršin, L. M. 1705: On the stability of rods and plates under conditions of creep.

Kurth, Rudolf. 1942: Kritik der dynamischen Massenschätzung kugelförmiger Sternhaufen.

Kurzweil, J. 1357: (with Vorel, Z.) On linear control systems. 4355 On the spectral decomposition of Hermitian operators.

Kusakabe, T. 3885: (with Chikawa, K. and Iséki, K.) On a problem by
H. Steinhaus. 3886: (with Chikawa, K.; Iséki, K. and Shibamura,
K.) Computation of cyclic parts of Steinhaus problem for power 5.

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Kushner, Harold J. 4623: A versatile stochastic model of a function of unknown and time varying form.

Kushwaha, R. S. 1021: (with Bhatnagar, M. S.) Mechanical decay of a spherical shock wave in a stellar atmosphere.

Kuske, A. 4751: Die Gesetzmässigkeiten der Doppelbrechung.

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Kustaanheime, Paul. 2915: Ueber die Bestimmung der oakulierenden Bahn eines künstlichen Erdsatelliten.

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Kvantaliani, K. I. 1418: Volterra integro-differential equations with small coefficients for the higher derivatives. 2402: A boundaryvalue problem for integro-differential equations of Volterra type

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Kwapiss, M. 341: (with Palozewski, B. and Pawelski, W.) Sur l'existence et l'unicité des solutions de certaines équations différentielles du type  $u_{ayz} = f(x, y, z, u, u_x, u_y, u_x, u_{xy}, u_{xy})$ .

Kwun, Kyung Whan. 3512: Upper semicontinuous decompositions of the n-sphere. 3513: On 3-manifolds that are not simply connected. Kyner, W. T. 4688: (with Galletly, G. D. and Moller, C. E.) Numerical | Lanz, L. 1783: On the energy conservation for the motion of a radiating methods and the bending of ellipsoidal shells.

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6.

Ladányi, K. 1886: (with Szépfalusy, P.) An approximate solution of a generalized statistical model.

Ladopoulos, P. 2481: Sur les courbes d'Apollonius.

Ladyženskaja, O. A. 342: The method of finite differences in the theory of partial differential equations. 5271: (with Ural'ceva, N. N.) Differential properties of bounded generalized solutions of multidimensional quasilinear elliptic equations and variational problems. 5288: (with Ural'ceva, N. N.) A boundary-value problem for linear and quasi-linear parabolic equations. Lafon, Jean-Pierre. 99: Hensélisation.

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Laguardia, Rafael. 3331: On some asymptotic properties of the Laplace transformation.

Lagunov, V. N. 2564a: The largest sphere contained in a closed surface. 2564b: On the largest sphere contained in a closed surface. II.

Lattone, E. V. 1730: Limiting conditions for enoidal and Stokes waves. Lajos, Sánder. 136: Generalized ideals in semigroups. 5079: On quasiideals of regular ring.

Lakshmikantham, V. 1326: Upper and lower bounds of the norm of solutions of differential equations. solutions of differential equations. 2278: Uniqueness theorems for ordinary and hyperbolic differential equations. 3238: On the stability and boundedness of differential systems. 5237: Notes on a variety of problems of differential systems.

Lakshminarasimhan, T. V. 1284: On the maximum terms of an entire function and its derivatives.

Lal, K. B. 1934: (with Mishra, R. S.) Einstein's connections. I. Degenerate cases of the first class.

de Lamadrid, Jesús Gil. Ses Gil de Lamadrid, Jesús.

Lambert, John D. 3610: (with Mitchell, Andrew R.) On the solution of y'=f(x,y) by a class of high accuracy difference formulae of low

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Lanczos, C. 3782: The splitting of the Riemann tensor.

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Landé, Alfred. 1816: Warum interferieren die Wahrscheinlichkeiten? Landis, E. M. 316: Some questions in the qualitative theory of elliptic and parabolic equations. 4045: (with Gerver, M. L.) A generaliza-tion of the mean-value theorem for functions of several variables.

Landra, R. 3796: (with Kull', I.) A method of solving the generalized transportation problem.

Landsberg, Max. 422: Lineare beschränkten Abbildungen von einem Produkt in einen lokal radial beschränkten Raum und ihre Filter.

Lang, H. A. 3640: Two verifications of the Karal-Keller theory of wave propagation.

Lange, F. H. 4957: Anwendungen des Korrélationsdetektors in der Mess- und Regelungstechnik.

Lange, Oskar. 1948: \*Introduction to econometrics.

Langefors, Börje. 5819: Algebraic topology for elastic networks.

Langenbach, Arno. 4359: Die Regularisierung nichtlinearer Glei-4670: Variationsmethoden in der nichtlinearen Elastizitāts und Plastizitātstheorie.

Langer, G. = Langer, Heinz.

Langer, Heinz. 1458: Zur Spektraltheorie J-selbstadjungierter Operatoren. 1457: On J-Hermitian operators. 3378: Ein Zersatz für Operatoren im Hilbertraum.

Lanke, Jan. 1465: On the asymptotic distribution of eigenvalues of certain one-dimensional Sturm-Liouville operators.

electron with particular reference to the hyperbolic motion.

Lapeyre, Benée. 2776: Détermination numériques des foyers en optique électronique des systèmes magnétiques de révolution. Lapidus, L. I. 2829: (with Čžou, Guan-Čžao) Low-energy limit of the

yN-scattering amplitude and crossing symmetry.

Laptev, B. L. 1527: Application of Lie differentiation to investigation

of goodesic displacement in a space of linear elements.

Lapuškin, I. T. 1673: Existence and uniqueness of solutions of a class of boundary-value problems of elasticity theory.

Larcher, Heinrich. 490: Solution of a geometric problem by Fejes Toth. Lardner, R. W. 4826: Analyticity of the general unitarity term. 4827: The general unitarity term.

Lary, Edmund C. 4746: A theory of thin airfoils and slender bodies in fluids of finite electrical conductivity with aligned fields.

LaSalle, J. P. 303: Asymptotic stability criteria. 304: Complete stability of a nonlinear control system.

Lashof, R. K. 4523: (with Dyer, Eldon) Homology of iterated loop

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Lasota, A. 4249: Sur la relation entre le problème de Goursat, le problème de Cauchy et le problème mixte pour l'équation de la corde vibrante.

La Tegola, Antonio. 2741: La risoluzione del problema della trave mediante sviluppi in serie di autofunzioni.

Latimer, J. F. 1230: (with Tamura, Takayuki and Merkel, R. B.) Note on the direct product of certain groupoids.

Latipev, H. R. 1325: Some theorems on pairing of singular points. cher, Nico F. 646: On the stabilization of the Poisson variance.

Läuchli, H. 1997: Ein Beitrag zur Kardinalzahlarithmetik ohne Auswahlaxiom.

Läuchli, P. 1089: Schaltalgebra.

Laufer, P. J. 104: (with Tomber, M. L.) Some Lie admissible algebras. Laugwitz, Detlef. 1498: Einige differentialgeometrische Charakterisierungen der Quadriken. 5377: Anwendungen unendlich kleiner Zahlen. II. Ein Zugang zur Operatorenrechnung von Mikusiński.

Laurent, Andre G. 1052: Bombing problems. A statistical approach.

Laurenti, Fernando. 2826: Sul calcolo di alcuni limiti, connessi colla risoluzione delle equazioni. 5210: Sopra alcune notevoli equazioni differenziali.

Lauwerier, H. A. 5200: A note on the summation of some series of Bessel functions. 5274: Solutions of the equation of Helmholtz 5275: Solutions of the equation of Helmholtz in an angle. IV. in an angle. V. The case of a halfplane. 5793: The North Sea problem. VII. Non-stationary wind-effects in a rectangular bay. Numerical part.

Laverrière, R. 979: Étude d'une méthode d'approximation pour

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Lavi, Abrahim. 4775: (with Amitay, Noach and Young, Frederick) Electromagnetic field theory solution of the infinite tapered-plane transmission line.

Lavis, A. 4022: Groupes topologiques ordonnés.

Lavrik, A. F. 2050: Binary problems of additive prime number theory connected with the method of trigonometric sums of I. M. Vinogradov. Lax, P. D. 4345: Translation invariant spaces.

Laxion, R. R. 5085: Primitive distributively generated near-rings. Lazarev, V. G. 1658: (with Pill', E. I.) On the integration of potentialpulse forms.

Leader, E. 2825: The "photon-spurion" and dispersion theory.

Leader, S. 4486: On duality in proximity spaces. Leaf, Boris. 1884: (with Resibois, P.) Time-independent perturbation solution of the Liouville equation. 2777: On the relativistic motion of two charged particles in classical electrodynamics. 5704:
Dissipative potentials and the motion of a classical charge.

Leblane, Hugues. 2959: An extension of the equivalence calculus.

Lebiane, Leon. 5913: Duality for Boolean equalities. Le Cam, Lucien. 5567: An approximation theorem for the Poisson binomial distribution. 5571: (with Schwartz, Lorraine) A necessary and sufficient condition for the existence of consistent estimates. Lech, Christer. 2955: Note on multiplicities of ideals.

- Lechner, J. A. 4615: Optimum decision procedures for a Poisson process parameter.
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- Levenitein, V. I. 1964: Self-adaptive automata for decoding message 1967: Certain properties of code systems.
- Levi, F. W. 5444: Über angeordnete projektive Ebenen.

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- Ludwig, G. W. 1910: (with Woodbury, H. H.) Electron spin resonance in semiconductors.
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Nozières, P.) Derivation of the Landau theory of Fermi liquids. II. Magnus, Kurt. 1868: \*\*Schwingungen. Eine Einführung in die Equilibrium properties and transport equation.

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Mahler, K. 2036: On some inequalities for polynomials in several variables. 3035: A correction to the paper "An interpolation series for continuous functions of a p-adic variable".

Mahovikov, V. I. 1678: Several problems in elasticity theory for a cylinder of transversely isotropic material. 1681: (with Iščenko, I. M.) Determination of stress in a space formed of an isotropic medium having a cylindrical cavity.

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Makinson, R. E. B. 1900: (with Roberts, A. P.) Electron eigenstates in a one-dimensional liquid.

Makowski, A. 2031: Remarks on triangular and tetrahedral numbers. 5632: On the equation  $13^{3}-3^{5}=10$ .

Maksimov, L. 1915: (with Kagan, Ju.) Transport phenomena in a paramagnetic gas.

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Meggitt, J. E. 1966: Error correcting codes and their implementation

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Michel, L. 1870: Relations between polarizations due to charge independence.

Michler, Lothar. 2141: Über die Einbettbarkeit spezieller Kategorien in Brandtsche Gruppoide.

Michlin, Solomon G. = Mihlin, S. G.

Migdal, A. B. 1981: Single-particle excitations and superfluidity in Fermi systems with arbitrary interaction. Application to the nucleus. Mihailescu, Eugen. 9: Sur quelques théorèmes dans les calculs des propositions bivalentes.

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of systems of nonlinear difference-differential equations. 4202: Singular perturbation analyses of the differential equations of a tunnel diode circuit.

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Mishra, R. S. 1934: (with Lal, K. B.) Einstein's connections. I. Degenerate cases of the first class.

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Mitrinović, Dragoslav S. 2970: (with Mitrinović, Ružica S.) Tableaux d'une classe de nombres reliés aux nombres de Stirling. 2971: (with Mitrinović, Ružica S.) Sur une classe de nombres se rattachant aux nombres de Stirling. Appendice: table des nombres de Stirling.

Mitrinović, Ružica S. 2970: (with Mitrinović, Dragoslav S.) Tableaux d'une classe de nombres reliés aux nombres de Stirling. 2971: (with Mitrinović, Dragoslav S.) Sur une classe de nombres se rattachant aux nombres de Stirling. Appendice: table des nombres de

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Mitropol'skii, Ju. O. = Mitropol'skii, Ju. A.

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Nastold, Hans-Joachim. 2069: Zur Cohomologietheorie in der algebraischen Geometrie. II. Serres Dualitätssatz und der Satz von Riemann-Roch für Flächen. 2476: (with Nastold, Th.) Begründung der Euklidischen Geometrie mit Hilfe von Abbildungen.

Nasteld, Th. 2476: (with Nasteld, H.-J.) Begründung der Euklidischen Geometrie mit Hilfe von Abbildungen.

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Nayyar, N. K. 1776: (with Auluck, F. C.) The stability of a self-gravitating fiuld sphere in presence of a magnetic field.

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Neumann, Hanna. 3881: (with Neumann, B. H.) On linked products of groups. 5098: On a theorem of Auslander and Lyndon. 5102: (with Neumann, B. H. and Neumann, Peter M.) Wreath products and varieties of groups.

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the membrane between two eccentric circles. Noonan, B. 105a: Representations subduced on an ideal of a Lie algebra. 105b: The construction of representations of Lie algebras of characteristic zero.

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Nordgren, R. P. 4692: On vibrations of pretwisted rectangular plates. Nordlander, Göte. 4329: The modulus of convexity in normed linear 4330: On sign-independent and almost sign-independent.

convergence in normed linear spaces. Norguet, François. 70: Résolution des systèmes de deux équations algébriques à l'aide de fonctions hypergéométriques. 2620: (with Srinivasacharyulu, Kilambi) Sur certaines surfaces analytiques complexes compactes.

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Northcott, D. G. 1183: The centre of a hereditary local ring. 2091: Specialization of the isolated common zeros of a system of polynomial equations.

Northover, F. H. 921: The diffraction of electromagnetic waves around a finite, perfectly conducting cone.

Norton, Richard E. 969: (with Coleman, Sidney) Runaway modes in model field theories. 4841: (with Fronsdal, Christian and Mahanthappa, Kalyana) Integral representation for a scattering amplitude with complex singularities.

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Novikov, I. D. 1946: Properties of the curvature of the comoving space of some cosmological models considered in a quasi-Newtonian

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Novikev, S.S. 5671: (with Rjazancev, Ju. S.) On the reflection of a plane sound wave from the open end of a circular tube.

Novosel'cev, V. N. 5821: Optimum control characteristics of a pulsed relay system in the presence of random disturbances

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Novoselov, V. S. 5619: The extremal character of the Hamilton-Ostrogradskii principle in non-holonomous mechanics. Novozhilov, Yu. V. = Novožilov, Ju. V.

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Nozières, P. 4872: (with Luttinger, J. M.) Derivation of the Landau theory of Fermi liquids. I. Formal preliminaries. 4873: (with Luttinger, J. M.) Derivation of the Landau theory of Fermi liquids. II. Equilibrium properties and transport equation.

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(with Rotman, J. J.) Singular cohomology groups.

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Obádovics, J. Gy. 2: \*Taschenbuch der Elementar-Mathematik. Mit praktischen Anwendungen.

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Okune, Tadakazu. 3593: (with Okune, Chieke) On the construction of a class of partially balanced incomplete block designs by calculus of blocks.

Olech, C. 2258: A connection between two certain methods of successive approximations in differential equations.

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O'Malley, Thomas F. 971: (with Rosenberg, Leonard and Spruch, Larry) Low-energy scattering of a charged particle by a neutral polarizable system.

Omarov, T. B. 1920: (with Idlis, G. M.) The evolution of the orbits of widely separated binaries with corpuscular emission.

Omnès, R. 5731: Some remarks about unitarity.

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Ong, R. S. B. 1945: On the reflection and refraction of hydromagnetic waves in interstellar medium.

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Oort, Frans. 2070: Sur le schéma de Picard. 5064: A construction of generalized Jacobian varieties by group extensions.

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Orth, Den. 7: (with Thomas, Ivo) Axioms for the "Gergonne"-relations. Osada, J. 3748: Fermion-like treatments of fermion pairs.

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Ôya, Shinichi. 1981: A biography of Takakazu Seki.

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Pachner, Jaroslav 1921: Das Gravitationsfeld eines Massenpunktes im expandierenden Kosmos. 4921: Zur Entstehung und Stabilität der Nebelhaufen.

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Pandya, I. M. 1930: (with Vaidya, P. C.) Wave solutions in general relativity. L.

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F

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mented subspaces of the space m(S). 3344: (with Bessaga, C.) Petrina, D. Ja. 1781: Solution of the inverse diffraction problem

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Pill', E. I. 1658: (with Lazarev, V. G.) On the integration of potential-

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of carriers in semiconductors. I. Neglecting spin-orbit interaction. Pimbley, George H., Jr. 2262a: A sublinear Sturm-Liouville problem. 2262b: A superlinear Sturm-Liouville problem.

Pines, D. 1777: (with Ichimaru, S. and Rostoker, N.) Observation of critical fluctuations associated with plasma-wave instabilities. 1899: (with Schrieffer, J. Robert) Approach to equilibrium of electrons, plasmons, and phonons in quantum and classical plasmas. 5759: (with Wyld, H. W., Jr.) Kinetic equation for plasma.

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Pomerančuk, I. Ja. 1862: (with Gribov, V. N.) Complex angular momenta and the relation between the cross sections of various processes at high energies. 2639: (with Kobzarev, I. Ju. and Okun', I. B.) Electromagnetic interaction of a neutral vector meson. 4850: (with Gribov, V. N.) Regge poles and Landau singularities.

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da Providencia, J. 5747: A variational principle for Brueckner theory. Prudnikev, A. P. 2257: On functions satisfying the differential equation  $x^2y'' + 3xy'' + y' + x^2y = 0$ . 2397: (with Ditkin, V. A.)  $\bigstar$  Operational calculus in two variables and its applications.

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Pták, Vlastimil. 2448: (with Fiedler, Miroslav) Sur la meilleure approximation des transformations linéaires par des transformations de rang prescrit.

Pu, Robert. 1821: (with Mittleman, M. H.) Optical potential for closely coupled states.

Pueci, Carlo. 5268: Un problema variazionale per i coefficienti di equazioni differenziali di tipo ellittico.

Puhov, G. E. 5586: A quasi-analog electronic model for solving a general linear programming problem. Pukánszky, Lajos. 4034: On the Kronecker product of irreducible unitary representations of the inhomogeneous Lorentz group.

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Ráb, Miloš. 2283: (with Mařík, Jan) Asymptotische Eigenschaften von Lösungen der Differentialgleichung  $y = A(x) \cdot y$  im nichtoszillatorischen Fall.

Rabinowitz, Philip. 1636: (with Davis, Philip J.) Advances in orthonormalizing computation.

Rabkin, E. L. 5353: Moments of continuous functions.

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Radecki, J. 5321: On modified Landau polynomials.

Radhakrishna Rao, C. = Rao, C. Radhakrishna.

Radicati, L. A. 3741: (with Speiser, D.) Global symmetries and selection rules for weak interactions.

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Rajagopal, E. S. 5688: On the exact theory of the elastic wave propagation in classical piezoelectric media.

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Rakitskii, Ju. V. 5592: Some properties of solutions of systems of ordinary differential equations by one-step methods of numerical

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Ramabhadran, N. 109: (with Gopalakrishnan, N. S. and Sridharan, R.) A note on the dimension of modules and algebras.

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Rangachari, M. S. 3302: Remarks on some Tauberian theorems for Nörlund summability.

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Ranga Rao, R. 1258: Relations between weak and uniform convergence of measures with applications.

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Rao, B. R. 5772: General relativity and perihelion advance.

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Rastall, Peter. 1848: Another form of quantum electrodynamics.

Rathna, Seekote L. 4736: (with Rajeswari, Ganjam K.) Flow of a particular class of non-Newtonian visco-clastic and visco-inelastic fluids near a stagnation point.

Rauch, H. E. 5178: The singularities of the modulus space.

Rautenberg, Wolfgang. 1699: Unentscheidbarkeit der euklidischen Inzidenzgeometrie.

Ray, W. D. 2660: (with Pitman, A. E. N. T.) An exact distribution of the Fisher-Behrens-Welch statistic for testing the difference between the means of two normal populations with unknown variances.

Raychaudhuri, A. K. 1922: (with Som, M. M.) Stationary cylindrically symmetric clusters of particles in general relativity.

Raymond, Frank. 5127: The orbit spaces of totally disconnected groups of transformations on manifolds.

Rayner, M. E. 3319: A minimum principle for the squares of Fourier coefficients. 3320: Upper and lower bounds for the squares of Fourier coefficients.

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Rédei, László. 2115: Eine Ergänzung zu meiner Arbeit über gruppentheoretische schiefe Produkte.

Redheffer, Raymond. 1792: On the relation of transmission-line theory to scattering and transfer. 3184: On the inequality  $\Delta u \ge$ f(u, |grad u|). 5385: On a certain linear fractional transformation.

Red'kov, M. I. 4096: The range of the functional  $I = \ln ((w^{\lambda}\varphi'(w)^{1-\lambda} + \varphi'(0)^{\nu})/\varphi(w)^{\lambda})$  in the class  $S_1[[\varphi(w)]]$ . 4087: The range of the functional  $I = \ln (w^{\lambda}\varphi'(w)^{1-\lambda}\varphi'(0)^{\nu}/\varphi(w)^{\lambda}|\varphi(w)|x)$  in the class  $S_1$ .

Ree, Rimhak. 2123: A family of simple groups associated with the simple Lie algebra of type (G<sub>2</sub>).

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Reid, J. D. 1209: On quasi-decompositions of torsion-free Abelian groups.

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Reidelbach, W. 813: Der Spannungszustand im Übergangsgebiet einer rechtwinkligen Rohrabzweigung.

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Reiffen, Barney. 1969: Sequential decoding for discrete input memoryless channels.

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Reismann, Herbert. 941: Temperature distribution in a spinning sphere during atmospheric entry.

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Reizini, L. É. 2269: Discrimination problems in higher-dimensional space.

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4886: (with Prigogine, I.) On the statistical theory of superfluidity.

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Révész, P. 3055: A probabilistic solution of problem 111 of G. Birkhoff.
Rezni! \* I. 1972: The realization of monotonic functions by means of nets. \* \* \* \* \* consisting of functional elements.

Rezucha, ivan. 2679: (with Fan, C. T. and Muller, Mervin E.) Development of sampling plans by using sequential (item by item) selection techniques and digital computors.

de Rham, Georges. 2541: La théorie des formes différentielles extérieures et l'homologie des variétés différentiables.

Rheinboldt, Werner C. 1632: (with Antoniowicz, Henry A.) Numerical analysis and functional analysis.

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Rjabeev, I. I. 5378: Local properties of Mikusiński operators.

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Roberts, A. P. 1990: (with Makinson, R. E. B.) Electron eigenstates in a one-dimensional liquid.

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Robertson, M. M. 3919: Partitions of large multipartites. 5046: The evaluation of a definite integral which occurs in asymptotic partition theory.

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Robinson, B. B. 1898: (with Bernstein, I. B.) A variational description of transport phenomena in a plasma.

Rebinson, Derek W. 977: Zero-mass representations of the inhomogeneous Lorentz group.

Robinson, Enders A. 4576: Extremal representation of stationary stochastic processes.

Rebinson, Iver. 4902: (with Bergmann, Peter G. and Schücking, Engelbert) Asymptotic properties of a system with nonzero total

Redin, Ju. L. 2195: (with Gusman, S. Ja.) The kernel of an integral of Cauchy type on closed Riemann surfaces. 4092a: Integrals of Cauchy type and boundary-value problems for generalized analytic functions on closed Riemann surfaces. 4092b: Algebraic theory of generalized analytic functions on closed Riemann surfaces.

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Relando, Magda. 598: Invarianti proiettivi simultanei di un elemento di rigata e di un altro elemento.

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Roman, P. 918: Correlation theory of stationary electromagnetic fields. IV. Second order conservation laws. 1780: (with Parrent, G. B., Jr.) On the matrix formulation of the theory of partial polarization in terms of observables. 1871: On the gauge invariant theory of elementary particle interactions.

Romanovskii, A. V. 1267: Imbedding and conjugacy of subgroups in finite groups.

Romanovskii, I. V. 1958: Reduction of a game with complete memory to a matricial game. 3793: Solution of a game of D. Blackwell. 4926: On the equivalence of various formulations of the transportation problem.

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Rose, Alan. 1987: An extension of a theorem of Margaris. 4994: Sur les applications de la logique polyvalente à la construction des machines Turing.

Rose, Gene F. 1989: Output completeness in sequential machines.

1990: (with Ginsburg, Seymour) A comparison of the work done by generalized sequential machines and Turing machines.

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Roseblade, J. E. 3088: On certain classes of locally soluble groups.

Rosén, Bengt. 5528: On the asymptotic distribution of sums of independent identically distributed random variables.

Rosen, Gerald. 1932: Symmetries of the Einstein-Maxwell equations... Rosen, Robert. 1955: A note on abstract relational biologies.

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- Larry) Low-energy scattering of a charged particle by a neutral polarisable system.
- Resemberg, R. L. 1896: (with Wu, Ta-You) Kinetic equation describing irreversible processes in ionized gases.
- Resemberg, R. M. 792: The normal modes of nonlinear n-degree-offreedom systems.
- Rosenblatt, F. 1658: (with Block, H. D. and Knight, B. W., Jr.)

  Analysis of a four-layer series-coupled perceptron. II.

  1659:
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  4564: (with Newell, G. F.) Zero crossing probabilities for Gaussian stationary processes.
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- Rosser, J. Barkley. 1139: (with Schoenfeld, Lowell) Approximate formulas for some functions of prime numbers.
- Rosset, J. 5762: (with Ayant, Y. and Bélorizky, E.) Quelques propriétés des niveaux cristallins  $\Gamma_0$  en symétrie cubique.
- Rostoker, N. 1777: (with Ichimaru, S. and Pines, D.) Observation of critical fluctuations associated with plasma-wave instabilities.
- Rota, Gian-Carlo. 1269: On the classification of periodic flows.

  (with Birkhoff, Garrett) 

  Ordinary differential equations.

  Une théorie unifiée des martingales et des moyennes ergodiques.
- Rotenberg, M. A. 1998: (with Bonnor, W. B.) Transport of momentum by gravitational waves: the linear approximation.
- Rotenberg, Manuel. 4875: Application of Sturmian functions to the Schroedinger three-body problem: elastic e<sup>+</sup>-H scattering.
- Roter, W. 3475: Sur l'application géodésique d'une variété riemannienne sur l'espace récurrent.
- Roth, J. Paul. 4942: Minimization over Boolean trees. 4969 (with Karp, R. M.) Minimization over Boolean graphs.
- Rothman, N. J. 1541: Linearly quasi-ordered compact semigroups.

  5563: (with Hunter, R. P.) Characters and cross sections for certain semigroups.
- Retkiewicz, A. 38: Démonstration arithmétique de l'existence d'une infinité de nombres premiers de la forme nk+1. 3024: On Lucas numbers with two intrinsic prime divisors.
- Rotman, J. J. 3975: (with Nunke, R. J.) Singular cohomology groups.

  Roux, Delfina. 3171: Sulla composizione per somma di due sistemi di
  numeri complessi e applicazione alle funzioni analitiche. 3173:
  Sull'isolamento da sistemi di punti e sul modulo delle funzioni intere
  di genere zoro.
- Rovnyak, James. 2455: Ideals of square summable power series.
- Rowe, H. E. 3689: Approximate solutions for the coupled line
- Roxin, Emilio. 305: The existence of optimal controls.
- Roy, Jean-François. 3664: Équations intrinsèques des écoulements turbulents incompressibles.
- Roy, Kamalaranjan. 31: Newmanian geometry. I.
- Roy, Prabir. 5495: Failure of equivalence of dimension concepts for metric spaces.
- Roy, Purnendu Mehan. 702: On the properties and construction of HGD designs with m-associate classes.
- Rey, S. N. 4610a: (with Cobb, Whitfield) Mixed model variance analysis with normal error and possibly non-normal other random effects. I.

- The univariate case. 4610b: (with Cobb, Whitfield) Mixed model variance analysis with n8rmal error and possibly non-normal other random effects. II. The multivariate case.
- Royden, H. L. 2190: The boundary values of analytic and harmonic functions. 5163: A generalization of Morera's theorem.
- Rozanev, Ju. A. 506: An application of the central limit theorem.
  597: (with Volkonskii, V. A.) Some limit theorems for random functions. II. 1580: Linear extrapolation of multi-dimensional stationary processes of the first rank with discrete time.
- Roldestvenskii, B. L. 325: A construction of discontinuous solutions of a system of two quasi-linear equations. 326: Discontinuous solutions of hyperbolic systems of quasilinear equations. 1496: A system of quasi-linear equations in the theory of surfaces. 4219: Construction of a generalized solution of the Cauchy problem for a system of quasi-linear equations in several variables.
- Rozenblat-Rot, M. = Rozenblatt-Roth, Millu.
- Rozendorn, E. R. 2524: Properties of asymptotic lines on surfaces with slowly varying negative curvature.
- Rozenvasser, E. N. 2294: On the construction of the Lyapunov function for a class on non-linear systems.
- Réssa, Pál. 294: On the explicit solution of differential and difference equations satisfying general initial conditions. 3749: (with Tassi, G.) Eine Matrizenmethode zur Lösung statisch unbestimmter Systeme im elasto-plastischen Bereich.
- R.-Salinas, Baltasar. 2152: The set of values of a differential coefficient. 2201: Growth of a function analytic in an angle.
- Rubanik, V. P. 4205: (with Fodcuk, V. I.) On the existence and the properties of a bounded solution of a system of quasi-linear differential-difference equations. 4212: Resonance phenomena in quasi-linear vibrating systems with retarded arguments.
- Rubel, L. A. 5175: (with Malliavin, Paul) On small entire functions of exponential type with given zeros.
- Ruben, Harold. 645: Probability content of regions under spherical normal distributions. IV. The distribution of homogeneous and non-homogeneous quadratic functions of normal variables. 1577: Some aspects of the emigration-immigration process. 2170: A multidimensional generalization of the inverse sine function. 2662: A new asymptotic expansion for the normal probability integral and Mill's ratio. 4607: An asymptotic expansion for a class of multivariate normal integrals.
- Rubin, Herman. 4597: (with Olkin, Ingram) A characterization of the Wishart distribution. 4605: The estimation of discontinuities in multivariate densities, and related problems in stochastic processes.
- Rubinoff, Morris. 5607: (with Alt, Franz, L., co-editor) \*Advances in computers, Vol. 3.
- Rubinštein, G. Š. 4932: (with Gavurin, M. K. and Surin, S. S.) On the optimal utilization of production resources in fulfillment of several types of jobs (Generalized transportation problem).
- Rubinstein, L. I. 768: The numerical solution of the integral equations of the Stefan problem. 4258: On a case of Stefan's problem.
- Rudeanu, Sergiu. 2982: Independent systems of axioms in lattice theory. 4971: Boolean equations and their applications to the study of bridge-circuits. I.
- Rüdiger, D. 809: Zur Stabilität der Platten.

  A.) Eine Erweiterung des Hamiltonschen Prinzips zur Integration mechanischer Anfangs-Randwertaufgaben.

  5615: Eine Erweiterung des Prinzips von Hamilton.
- Rudik, A. P. 3716: Nature of the amplitude singularities in quantum field theory.
- Rudin, Walser. 1460: Projections on invariant subspaces. 5166
  Permutations of Taylor coefficients of bounded functions.
- Ruegg, H. 3739: Symmetries of strong interactions and electromagnetic form factors.
- Ruelle, D. 964: Domain of holomorphy of the three-point function.
  4811: On the asymptotic condition in quantum field theory.
  4812:
  (with Araki, H. and Hepp, K.) On the asymptotic behaviour of Wightman functions in space-like directions.
- Ruhadze, A. A. 991: (with Ginzburg, V. L. and Silin, V. P.) Correction to the paper "Electrodynamics of crystals and the theory of excitons".
- Rühs, P. 413: Über die Anwendung der Operatorenrechnung auf lineare Integralgieichungen vom Faltungstypus.

Ruijgrek, Th. W. 5710: The S-matrix for systems with bound states. Rumer, Ju. B. 1894: (with Dyhne, A. M.) Thermodynamics of a plane Ising-Onsager dipole lattice.
Rumjancev, V. V. 1663: On systems with friction.

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Rund, Hanne. 1469: The theory of problems in the calculus of variations whose Lagrangian function involves second order derivatives: A new approach. 2887: Note on the Lagrangian formalism in relativistic mechanics. 3493: Über Finslersche Räume mit speziellen Krümmungseigenschaften.

Rung, D. C. 5181: Results on the order of holomorphic functions defined in the unit disk.

Runnenburg, J. Th. 630: An example illustrating the possibilities of renewal theory and waiting-time theory for Markov-dependent arrival-intervals.

Rusakov, S. A. 1217: Analogues of Sylow's theorem on inclusion of subgroups.

Ruscior, Ștefania. 502: Les aspects algébriques de la correspondances par parallélisme

Ruse, H. S. 5456: (with Walker, A. G. and Willmore, T. J.) \*Harmonic

Rushbrooke, G. S. 1906: (with Scoins, H. I.) Cluster sums for the Ising model. 1907: (with Eve, J.) High-temperature Ising partition function and related noncrossing polygons for the simple cubic

Russek, Arnold. 1905: (with Sherman, Charles H. and Flinchbaugh, David E.) Simple, analytic, atomic wave functions.

Russell, Dennis C. 4276: On Riesz and Riemann summability.

Russo, Giuseppe. 5442: Una classe di decomposizioni tattiche di un piano di Galois.

Russo, Vera. 3686: (with Ronchi, Laura; Toraldo di Francia, Giuliano and Zaccagnini, Corrado) Scattering of evanescent waves by cylindri-

Rutickil, Ja. B. 5393: On integral operators in Orlicz spaces.

Rutledge, Joseph D. 1993: On the definition of an infinitely many-valued predicate calculus

Rutsch, Martin. 2003: Koeffizientenringe lokaler Ringe.

Rybarski, A. 3252: Linearisation der Differentialgleichungen vom Pendeltypus.

Ryll-Nardzewski, Czesław. 3575: Remarks on processes of calls.

Rylov, Ju. A. 4466: On the possibility of describing a Riemannian space by means of a finite interval. I.

Ryndina, V. V. 257: On the completeness of systems of analytic functions consisting of solutions of second-order differential equations.

Ryser, H. J. 1999: (with Fulkerson, D. R.) Widths and heights of (0, 1)matrices.

Ryteń, Joanna. 1997: (with Plebański, Jerzy) Projections as observ-

Rytov, S. M. 617: The relative duration of a non-stationary random ргосева.

Saalfrank, C. W. 4495: (with Jaworowski, J. W.) A characterization of contractible compact Hausdorff spaces.

Saarnio, Uune. 19: Von den Rechenoperationen höherer Ordnung bei der Darstellung der transfiniten Ordnungszahlen.

Saaty, Thomas L. 1578: Some stochastic processes with absorbing barriers.

Saavedra, I. 4842: Dispersion relations, 'causal' inequalities and the completeness of the set of eigenstates in non-relativistic potential scattering.

Sabat, A. B. 286: Boundary-value problems with small parameter for ordinary linear differential equations.

Sačenkov, A. V. 1717: Linearization of the equations of the plane problem in the theory of an ideally plastic body.

Sachs, David. 1116: The lattice of subalgebras of a Boolean algebra.

Sachs, Horst. 3426: Ungleichungen für Umfang Flächeninhalt und Trägheitemoment konvexer Kurven.

Sacks, J. 1634: (with Derman, C.) Replacement of periodically inspected equipment (an optimal optional stopping rule). Sade, Albert. 2019: Théorie des systèmes demosiens de groupoïdes.

2020: Demosian systems of quasigroups. 2021: Entropie

demosienne dans un système de relations. 4017: Produit direct singulier de quasigroupes orthogonaux et anti-abéliens

Sadekev, V. P. 863: (with Dobrylman, E. M.) Unsteady motion of a viscous incompressible fluid near a rotating disk.

Sadovnikov, B. I. 5246: (with Bogoljubov, N. N.) On a variant of the averaging method.

Sadowski, W. 5586: A non-parametric test of comparing dispersions. 5581: (with Lukaszewicz, J.) On comparing several populations with a control population.

Saffman, P. G. 878: On the stability of laminar flow of a dusty gas. 1766: The structure of a hydromagnetic front in a cold collision-free

Sagalovič, Ju. L. 1974: Proof that a minimum number of contacts are required in the realization of one class of Boolean functions of n variables.

Sagermano, C. 4440: Rappresentazione delle calotte del terzo ordine, di dato centro e dato piano tagente.

Sagle, Arthur A. 3967: On derivations of semi-simple Malcev algebras. Sah, Chih-Han. 2124: Existence of normal complements and extension of characters in finite groups.

Sahara, K. 1963: (with Murphy, G. J.) A mean-weighted square-error criterion for optimum filtering of nonstationary random processes. Sahney, B. N. 391: On the (H, p) summability of Fourier Series.

Sahnovič, L. A. 460: The reduction of non-selfadjoint operators to triangular form. 461: A study of the "triangular form" of nonselfadjoint operators. 3214: The inverse problem for fourth-order equations

Sahnevs'kil, S. M. 820: (with Fradlin, B. N.) Determination of displacements of a shallow shell acted on by an arbitrary load.

Saldukov, G. M. 2330: An approximate solution of a non-linear problem of parabolic type.

Sain, B. M. 3104: Imbedding of semigroups in generalized groups.
3105: Representations of generalized groups.
5116: A system of axioms for semigroups imbeddable in generalized groups.

Sainouchi, Yoshikazu. 4093: (with Kobori, Akira) On the Riemann's relation on open Riemann surfaces.

Saite, Hidee. 4697: (with Sate, Kiichi) Flexural wave propagation and vibration of laminated rods and beams.

Saité, Teishiré. 4375: On groups of automorphisms of finite factors. 5402: Some remarks on a representation of a group. 5403: (with Tomiyama, Jun) Some results on the direct product of W\*-algebras.

Saitô, Tôru. 1185: On (m, n)-distributive division rings.

Saito, Tosiya. 293: On a problem of Riemann.

Saito, Yoshihiro. 4545: On decomposable mappings of manifolds. Sajasov, Ju. S. 906: (with Andriankin, É. I.) The effect of an external magnetic field on a boundary layer in a plasma.

Sakaguchi, Minoru. 2928: Stochastic games of survival. 4936: Dynamic programming for the optimal control of linear stochastic

Sakai, Eiiehi. 1294: On the problem of Levi.

Sakovič, G. N. 2337: Solution of a multivariate functional equation. Salahova, I. M. 5207: (with Čebotarov, G. N.) Solvability in finite form

of certain systems of differential equations, Salam, Abdus. 962: (with Kamefuchi, S. and O'Raifeartaigh, L.)

Change of variables and equivalence theorems in quantum field

Salehov, D. V. 4349: On the representability, by a singular integral, of functions belonging to Orlicz classes.

Salenius, A. 469: On extremals of finite sums and definite integrals. Salihov, N. P. 2173: On the solution of an algebraic equation by a method of N. I. Lobačevskii.

Salles, Francisque. 2694: Impossibilité d'appliquer, à certains problèmes techniques, les résultats des mathématiques pures. Exemples.
Saltanov, N. V. 894: (with Tkalič, V. S.) Waves of finite amplitude in

nonideal magnetohydrodynamics.

Salzer, Herberi E. 740: A multi-point generalization of Newton's divided difference formula. 5587: \*Tables for hyperosculatory

Salzmann, H. 2568: Topologische projektive Ebenen. Kompakte zweidimensionale projektive Ebenen. 3416: Topologische Struktur zweidimensionaler projektiver Ebenen.

- Samaddar, S. N. 5694: Two-dimensional diffraction in homogeneous anisotropic media.
- Samal, G. 2657: On the number of real roots of a random algebraic equation.
- Samarskii, A. A. 4642: (with Tihonov, A. N.) A best homogeneous difference scheme.
- Samellevič, G. S. 5648: Calculating the nonstationary flow around a lattice of arbitrary profiles which vibrate with an arbitrary phase
- Sampanthar, S. 3763: (with March, N. H.) Electron correlation in metals: density matrix approach.
- Sampei, Yeemon. 2963: Note on the effective choice of a point in the complement of an analytic set.
- Sampford, M. R. 709: Methods of cluster sampling with and without replacement for clusters of unequal sizes.
- Samuel, Pierre. 3046: Sur les anneaux factoriels.
- de San Román, J. Sancho. See Sancho de San Román, J.
- Sanchez-Palencia, E. 2966: Generalization to infinite sets of some problems in combinatories.
- Sancho de San Román, J. 1156: On the equivalence of two definitions of uniformixing co-ordinates at an algebraic sub-variety.
- Sandakova, N. N. 487: (with Delone, B. N.) Theory of stereohedra.
- Sanderson, D. E. 3542: Isotopy in manifolds.
- Sandler, R. 3071: A note on some new finite division ring planes.
- Sands, A. D. 3985: On a problem of L. Fuchs.
- Sandžieva, K. B. 5279: An approximate method of solving a boundaryvalue problem for the equation  $\Delta\Delta\varphi - \lambda^2\Delta\varphi = 0$ .
- Sankaran, N. 1224: (with Venkataraman, R.) A generalization of the ordered group of integers. 1227: On some permutable processes in semi-groups.
- Sankaranarayanan, A. 3695: (with Mathews, P. M.) Observables of a Dirac particle.
- Sankaranarayanan, G. 631: Limit distributions in the theory of 4557: Correction to "Limit distribu" was in the theory counters. of counters".
- Sano, Mitsuo. 1872: Rearrangement nuclear reactions and optical model. Sansone, G. 3226: Solutions périodiques de deuxième espèce de l'équation  $\theta + f(\theta, \alpha)h(\theta) = g(\theta)$ ;  $f(\theta, \alpha)$ ,  $g(\theta)$  périodiques par rapport à 0.
- Santaló, L. A. 1528: On the measure of sets of parallel linear subspaces in affine space. 1933: On unified field theories.
- Sanwal, J. C. 2545: Locally affine spaces with nilpotent fundamental groups.
- Saphar, Pierre. 1452: Sur quelques propriétés d'un opérateur linéaire continu dans un espace vectoriel topologique.
- Sapire, A. P. 2080: Characteristic polynomials of symmetric matrices. Sapiro, I. S. 4792: Expansion of the scattering amplitude in relativistic
- spherical functions. Sapogov, N. A. 381a: A sharpening of the theorem of Lozinskii and estiladee on polynomial approximations. 381b: On the norms
- of linear polynomial operators. Sapukov, B. N. 4469: Extremal displacement of a minimal hypersurface in Riemannian and Finsler spaces.
- Sarafa, Zuhair N. 5701: (with Soo, Shao L. and Besant, Robert W.) The nature of heat transfer from an enclosed rotating disk.
- Sarkadi, K. 4603: On testing for normality.
- Sarker, A. Q. 1852: Integral equations for the low-energy pion-pion 2840: (with Mandelstam, S.; Paton, J. E. and Peierls, Ronald F.) Isobar approximation of production proces
- Sarkova, N. V. 302: Approximate solution by the oscillating function method of differential equations with lagging argument.
- Sarkevskil, A. N. 351: Solutions of a class of functional equations. 352: The reducibility of a continuous function of a real variable and the structure of the stationary points of the corresponding iteration 353: Necessary and sufficient conditions for convergence of one-dimensional iterative processes.
- Sarmanov, O. V. 5572: On spurious correlation between random variables
- Sarndal, Carl-Erik. 3591: On a maximizing problem with several applications in statistical theory.

- Sarianov, A. A. 4192: Systems of ordinary differential equations with an explicit periodic dependence on a parameter.
- Sarymsakov, T. A. 2461: (with Antonovekii, M. Ja. and Boltianskii, V. G.) ★Topological semi-fields.
- Sasaki, Seibum. 2842: Characters of the electromagnetic and strong mesonic interactions.
- Sasaki, Shigeo. 492: On the total curvature of a closed curve. (with Hatakeyama, Yoji) On differentiable manifolds with certain structures which are closely related to almost contact structure. II. 4458: (with Hatakeyama, Y.) On differentiable manifolds with contact metric structures.
- Sasieni, Maurice. 5798: (with Yaspan, Arthur and Friedman, Lawrence) ★Methoden und Probleme der Unternehmensforschung.
- Sas'ko, G. M. 5406: (with Fisman, K. M.) Some systems of functions forming quasi-power bases in spaces of analytic functions in the
- Satake, Ichiro. 128: Some remarks to the preceding paper of Tsukamoto. 233: On modular functions of several variables (the compactification and its application).
- Sather, J. O. 2385: (with Fulks, W.) Asymptotics. II. Laplace's method for multiple integrals.
- Sato, Keniti. 606: Integration of the generalized Kolmogorov-Feller backward equations.
- Sato, Kilchi. 4697: (with Saito, Hideo) Flexural wave propagation and vibration of laminated rods and beams.
- Sate, Shigee. 5727: Second quantization and Lorentz invariance. II. Satő, Tokui. 4224: Sur l'équation aux dérivées partielles  $\Delta Z=$ f(x, y, z, p, q). II. 4225: Sur le problème de Dirichlet généralisé pour l'équation  $\Delta u = f(P, u, \partial u)$ . 5021: Sur l'analyse générale. 5022: Sur l'analyse générale. II. Intégrales d'applications de
- 5023: Sur les treillis de Boole \*-généraux. Sauer, Robert. 3438: Längentreue Deformationen von Kurvennetzen mit einer Geradenschar.
- Saul'ev, V. K. 5598: A method of numerical integration of diffusion 5599: Refined methods and two-sided approximations equations. to a solution of parabolic equations. 5600: The solution of parabolic equations of any order by means of nets. 5601: On the numerical integration of the heat equation. 5602: A method of automatic solution of boundary-value problems on high-speed 5603: On uniform grid schemes. computing machines.
- Saunders, L. R. 2684: The prediction of a random time series affected by a prescribed time function.
- Savage, I. R. 5578: (with Rao, U. V. R. and Sobel, M.) Contributions to the theory of rank order statistics: the two-sample censored case.
- Savel'ev, S. I. 4436: On surfaces with planar generators along which the tangent plane is constant.
- Săvulescu, Șt. N. 4722: Turbulence distribution for a one-dimensional flow in a pipe with arbitrary cross-section.
- Savvin, A. B. 4182: On second-order differential equations whose solutions are bounded by a given quantity.
- Saw, J. G. 671: Efficient moment estimators when the variables are dependent with special reference to type II censored normal data.
- Sawada, Tetsue. 4832: On the anomalous threshold and composite particles.
- Sawaki, Sumie. 538: A generalization of Matsushima's theorem. 1525: On the Matsushima's theorem in a compact Einstein K-space. 3487: On almost-analytic tensors in \*O-spaces. 5483: On almostanalytic tensors of mixed type in a K-space.
- Sawaragi, Yoshikazu. 1076: (with Sunahara, Yoshifumi and Nakamizo, Takayoshi) Statistical behaviors of the response of non-linear control systems subjected to random inputs. 1977: (with Sunahara, Yoshifumi and Soeda, Takashi) The discrepancy from the normal distribution of the probability of the response of non-linear control systems subjected to a Gaussian random input. 1978: (with Sunahara, Yoshifumi and Soeda, Takashi) Some general results on the statistical response of non-linear control systems by the theory of sampling distribution. 1079: (with Sugai, Narinobu) Accuracy considerations of the equivalent linearization technique for the analysis of a non-linear control system with a Gaussian random

- Sawicki, J. 2844: Higher random phase approximation and energy | Schmetterer, L. 724: Stochastic approximation. spectra of spherical nuclei.
- Saworotnew, P. P. 5465: (with Smith, J. F.) On some classes of scalarproduct algebras.
- Sawyer, R. F. 5733: (with Lee, B. W.) Regge poles and high-energy limits in field theory.
- Sazena, R. B. 4283: (with Sharma, A.) Some inequalities on polynomials. Saxena, R. K. 1410: Some theorems in operational calculus and infinite integrals involving Bessel function and G-functions. 2239: Some infinite integrals involving E-functions. 2240: Integrals involving Legendre functions.
- Saxena, S. C. 2555: (with Behari, Ram) Some properties and applications of Eisenhart's generalized Riemann space.
- ov, V. V. 4062: Some results on perfect measures.

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- Scarf, F. L. 989: Landau damping and the attenuation of whistlers.
- Sčerbakov, R. N. 5463: On affine-symmetric ruled complexes.
- Schaal, Hermann. 1489: Prüfung einer Kreisform mit Hohlwinkel und Taster. 3435: Ein Beitrag zur konstruktiven Differentialeometrie.
- S:haefer, Helmut H. 433: A generalized moment problem. Spectral measures in locally convex algebras. 5388: (with Walsh, B. J.) Spectral operators in spaces of distributions.
- Schaer, J. 2843: (with Klauder, J. R. and Loutwyler, H.) ys-ambiguity in the generally covariant spin affine connection.
- Schaerf, Henry M. 1268: On the existence of invariant measures.
- Schäffer, J. J. 163: Proof of a conjecture about measurable sets on the real line. 4193: Linear differential equations and functional analysis. VI.
- Schay, G., Jr. 626: Approximate methods for a multiqueueing problem. Schechter, Martin. 3281: Some LP estimates for partial differential 5276: Integral inequalities for partial differential equations. operators and functions satisfying general boundary conditions.
- Scheelbeek, Pieter Antonie Johan. 1288: ★On the geometry of zeros of a class of functions of a quaternion variable.
- Scheibe, Erhard. 4339: Über hermitische Formen in topologischen Vektorräumen, I.
- Scherk, P. 478: On the fundamental theorem of affine geometry. 4437: Osculating spaces.
- Scheuer, Ernest M. 652: Moments of the radial error.
- Schieber, E. 5316: Über das  $S_a$ -Verfahren der Limitierungstheorie.
- Schiek, Helmut. 111: Adjuntionsproblem und inkompressible Rela-
- Schiff, H. 4860: A classical theory of bosons.
- Schiffer, M. 179: (with Duren, P. L.) A variational method for functions schlicht in an annulus.
- Schild, A. 2892: (with Dyer, J. A.) The center of mass motion in a
- conservative gravitational theory of Whitehead's type.
  Schiller, Ralph. 1797: Quasi-classical theory of the nonspinning 1798: Quasi-classical transformation theory. Quasi-classical theory of the spinning electron. 2819: (with Schwartz, Melvin) Structure-independent electrodynamics in the electric-dipole approximation.
- Schiminovich, Samuel. 952: (with Finkelstein, David; Jauch, Josef M. and Speiser, David) Foundations of quaternion quantum mechanics.
- Schinzel, A. 1152: (with Davenport, H. and Lewis, D. J.) Equations of the form f(x) = g(y). 2997: On the composite integers of the form  $c(ak+b)! \pm 1$ . 2998: On some problems of the arithmetical theory of continued fractions. II. 2999: The intrinsic divisors of Lehmer numbers in the case of negative discriminant. 5026: Sur une conséquence de l'hypothèse de Goldbach. 5635: Solution d'un problème de K. Zarankiewicz sur les suites de puissances consécutives de nombres irrationnels.
- Schlenstedt, Günther. 3150: On an absolute constant pertaining to Cauchy's 'Principal Moduli' in bounded power series.
- Schlieder, S. 965: (with Rech, H.) Bemerkungen zur Unitäräquivalenz von Lorentzinvarianten Felden
- Schlitt, Herbert. 4954: (Besorger) \*\*Anwendung statistischer Verfahren in der Regelungstechnik. 4958: Grundlagen der statistischen Analyse und Synthese von Regelkreisen.
- Schlosser, H. 3762: Symmetrized combinations of plane waves and matrix elements of the Hamiltonian for cubic lattices.

- Schmid, Erich W. 999: A Monte Carlo method for nuclear many body problems.
- Sehmidt, Adam. 258: (with Hiller, Fritz) Über ein Eigenwertproblem linearer Differentialoperatoren mit zwei Parametern.
- Schmidt, E. T. 2983: (with Gratzer, G.) On congruence lattices of lattices. Schmidt, George. 2769: (with Finkelstein, David) Magnetically con-
- fined plasma with a Maxwellian core.
- Schmidt, Günter. 4666: (with Weidenhammer, Fritz) Instabilitäten gedämpfter rheolinearer Schwingungen.
- Schmidt, J. 2990: Einige algebraische Äquivalente zum Auswahlaxiom. 5017: On the definition of algebraic operations in finitary algebras.
- Schmidt, Jochen W. 756: Fehlerabschätzungen mit Hilfe eines Ver-
- Schmidt, Palle F. 5344: (with Mejlbo, Lars C.) On the determinants of certain Toeplitz matrices. 5345: (with Mejlbo, Lars) On the eigenvalues of generalised Toeplitz matrices
- Schmidt, Paul W. 1789: (with Miller, Akeley) Small angle x-ray scattering from randomly oriented cylinders of arbitrary cross section.
- Schmidt, Wolfgang M. 1125: Two combinatorial theorems on arithmetic progressions. 3902: Über die Normalität von Zahlen zu verschiedenen Basen. 3903: Simultaneous approximation and algebraic independence of numbers.
- Schmutzer, Ernst. 2900: Allgemeine Untersuchung über die Beziehung von Invarians zur Erhaltung im gekrümmten Raum für die Theorie klassischer Felder. 3711: Einige Gedanken zur einheitlichen Feldtheorie der Materie.
- Schneider, Franz. 1837: Recoil model in quantum field theory.
- Schneider, Fisna. 137: (with Losey, Gerald) Group membership in rings . and semigroups.
- Schneider, Johann. 4763: (with Bauer, Josef) Über die Stromdichteverteilung in zylindrischen Leitern mit elliptischem Querschnitt bei axialer Richtung des Wechselstromes.
- Schneiderman, M. A. 1609: (with Armitage, P.) A family of closed sequential procedures.
- Schoch, Manfred. 4282: Zur Theorie der Interpolation durch ganze rationale Funktionen.
- Schoenberg, I. J. 158: (with Besicovitch, A. S.) On Jordan ares and Lipschitz classes of functions defined on them. 1126: On two theorems of P. Erdős and A. Rényi. 4081: Extrema for gap power series of positive real part. 5324: (with Yang, C. T.) On the unicity of solutions of problems of best approximation.
- Schoenfeld, Lowell. 1139: (with Rosser, J. Barkley) Approximate formulas for some functions of prime numbers.
- Schooley, J. F. 2852: (with Ambler, E. and Eisenstein, J. C.) Traces of products of angular momentum matrices.
- Schöpf, Hans-Georg. 1919: Über eine Näherungslösung der Einsteinschen Feldgleichungen, welche ein quellenfreies Gravitationsfeld darstellt. 5699: Zur Thermodynamik negativer absoluter Tem-
- Schopp, J. 2517: Verschärfung eines Kreisabdeckungssatzes.
- Schrieffer, J. Robert. 1899: (with Pines, David) Approach to equilibrium of electrons, plasmons, and phonons in quantum and classical plasmas. Schröder, Johann. 5261: Invers-monotone Operatoren.
- Schroer, B. 1834: (with Haag, R.) Postulates of quantum field theory. Schubert, C. 4154: (with Korsak, A.) A determinant expression of Tchebychev polynomials.
- Schubert, Horst. 4519b: Bestimmung der Primfaktorzerlegung von Verkettungen.
- Schücking, Engelbert. 4962: (with Bergmann, Peter C. and Robinson, Ivor) Asymptotic properties of a system with nonzero total mass.
- Schulten, Budolf. 998: (with Güth, Wernfried) \*Reaktorphysik. Zweiter Band: Der Reaktor im nichtstationären Betrieb.
- Schumann, Walter. 4681: (with Soldini, Michel) Sur deux applications d'une loi de seconde approximation régissant la déformation d'un sol horizontal.
- Schurer, F. 5319: On the order of approximation with generalized Bernstein polynomials.
- Schuske, Georgellen. 1385: (with Thron, W. J.) On periodic infinite radicals.

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- Schwahl, F. 4878: (with Thirring, W.) A simple theory of superconductivity.
- Schwartz, J. 2431: Compact positive mappings in Lebesgue spaces.

  2918: \*Loctures on the mathematical method in analytical
- Schwarts, Laurent. 3363: Division par une fonction holomorphe sur une variété analytique complexe. 3364: Causalité et analyticité.
- Schwartz, Lorraine. 5571: (with LeCam, Lucien) A necessary and sufficient condition for the existence of consistent estimates.
- Schwartz, Melvin. 2812: Electric dipole approximation and the canonical formalism in electrodynamics. 2819: (with Schiller, Ralph) Structure-independent electrodynamics in the electric-dipole approximation.
- Schwarkman, Sol. 1543: Global cross sections of compact dynamical systems.
- Schwarz, Gideon. 682: Asymptotic shapes of Bayes sequential testing regions.
- Schwarz, R. J. 4939: (with Tung, F.) Optimum nonlinear filters for quantized inputs.
- Schwarz, Siefan. 3113: (with Parizek, Bohumir) Semicharacters of the multiplicative semigroup of integers modulo m.
- Schwars, Wolfgang. 2652: Über die Summe ∑n≤sp(f(n)) und verwandte Probleme. 3664: Weitere, mit einer Methode von Erdős-Prachar erzielte Ergebnisse. 4684: Irrationale Potenzreihen.
- Schwarzenberger, R. L. E. 1160: Vector bundles on algebraic surfaces.

  1161: Vector bundles on the projective plane.

  2611: Reducible vector bundles on a quadric surface.

  3544: (with Epstein, D. B. A.)

  Imbeddings of real projective spaces.
- Schweber, Silvan S. 5728: (with Sudarshan, E. C. G.) Asymptotic field operators in quantum field theory.
- Schweizer, Gerhard. 672: Untersuchung der auftretenden Fehler bei der Auswertung von statistischen Signalen.
- Schwiderski, E. W. 150: A lemma on monotonic functions.
- Schwinger, Julian. 961: Non-Abelian gauge fields. Commutation relations. 3721: Field-theory methods in non-field-theory contexts. 4822: Field-theoretic methods.
- Seeins, H. I. 24: The number of trees with nodes of alternate parity.

  1996: (with Rushbrooke, G. S.) Cluster sums for the Ising model.
- Soots, Dana. 1985: On a theorem of Rabin. 4993: Algebras of sets hinumerable in complete extensions of arithmetic.
- Scott, D. B. 3041: Correspondences between algebraic surfaces
- Scott, T. 2038: Combinantal forms of a quadric net applied to irreducible concomitant systems.
- Scott, W. T. 4167: (with Merkes, E. P.) Continued fraction solutions of the Riccati equation.
- Seriba, Christoph J. 1992: Zur Lösung des 2. Debeauneschen Problems durch Descartes.
- Sebastião e Silva, J. 453: Sur la définition et la structure des distributions vectorielles. 3354: Les espaces à bornés et la notion de fonction différentiable. 3380: La définition de spectre d'un opérateur et les opérateurs à spectre élémentaire non borné. 5400: Sur le calcul symbolique d'opérateurs permutables, à spectre vide ou non borné.
- Šedivá-Traková, Vera. 4484: On unions of strongly paracompact spaces.
- Seebass, R. 1765: On "transcritical" and "hypercritical" flows in magnetogasdynamics.
- Segal, J. 2582: A fixed point theorem for the hyperspace of a snake-like continuum.
- Segal, Sanford L. 3018:  $\uparrow$ On  $\pi(x+y) \leq \pi(x) + \pi(y)$ .
- Segel, L. A. 3659: (with Stuart, J. T.) On the question of the preferred mode in cellular thermal convection.
- Segre, Beniamine. 2865: Geometria delle matrici quadrate di dato ordine. 2495: Sulle quadriche mutuamente autopolari. 3448: Sur les invariants projectifs absolus attachés aux éléments curvilignes et aux réseaux. 5055: Geometry and algebra in Galois spaces.
- Sehgal, S. K. 3879: On P. Hall's generalisation of a theorem of Frobenius.
- Sehter, V. M. 3724: (with Ansel'm, A. A.; Gribov, V. N.; Danilov, G. S. and Djatlov, I. T.) On the maximum value of the coupling constant in field theory.

- Seidel, J. 2520: (with Peremans, W.) On null vectors of certain semidefinite matrices.
- Seidel, W. 5183: (with Bagemill, F.) Koebe ares and Fatou points of normal functions.
- Seifert, G. 3229: (with Hale, J. K.) Bounded and almost periodic solutions of singularly perturbed equations.
- Seifert, Herbert. 1518: Zum Satz von O. Bonnet über den Durchmesse einer Eitfläche.
- Seitz, Frederick. 1998: (with Turnbull, David, co-editor) ★Solid State Physics: Advances in research and applications. Vol. 13.
- Sekanina, Milan. 3518: On an ordering of the set of vertices of a connected graph.
- Seki, Setsuya. 1103: On transfinite inferences. II.
- Sekino, Kaoru. 4006: Eine Bemerkung über die Zerlegung der Gruppenebaraktere.
- Šelepin, L. A. 4796: The Racah method in the theory of relativistic equations.
- Selezov, I. T. 823: Investigation of transverse vibrations of a plate. 2742: On hypotheses forming the basis of refined equations of transverse oscillations of plates and some properties of these equations.
- Selfridge, R. G. 1176: (with Lomont, John S. and Maxfield, John E.)
  Similarity classifications of complex matrices.
- Semadeni, Z. 1432: Limit properties of ordered families of linear metric spaces. 1433: (with Musiclak, J.) Some classes of Banach spaces depending on a parameter. 5020: Free and direct objects.
- Semenov, E. M. 4352: (with Krein, S. G.) A scale of spaces.
- Šemetkev, L. A. 1205: On finite groups, in which all of certain recurrent π-proper maximal subgroups are invariant.
- Semjakin, E. I. 1028: The Lamb problem for an internal source.
- Sen, B. 1699: Some problems of indentation on the straight edge of a semi-infinite non-isotropic plate.
- Sen, D. K. 3471: On geodesics of a modified Riemannian manifold.
- Sen, N. R. 876: Isotropic turbulence preserving similarity.
- Sen, R. N. 522: On a correspondence between a system of second-order symmetric tensors and a system of affine connections.
- Senderov, E. L. 887: Diffraction of a cylindrical sound wave by a cylinder.
- Sendov, B. 2005: (with Martinov, N.) Graphs connected to the theory of mechanisms. 5031: Der Zahlensche Satz über die singulären Kettenbrüche und die Kettenbrüche nach nächsten Ganzen. 5144: An integral inequality for algebraic polynomials with only real zeros.
- Sendov, B. H. 3358a: (with Penkov, B. I.) s-entropy and s-capacity of the set of continuous functions. 3358b: (with Dimiev, B. and Penkov, B. I.) On the s-entropy and s-capacity of the set of continuous curves.
- Senik, P. M. 291: (with Mitropol'skii, Ju. O.) Construction of an asymptotic solution of an autonomous system having a strong non-linearity.
  3223: A non-autonomous quasi-linear system with many degrees of freedom in a domain of general resonance.
- Senior, T. B. A. 4771: Diffraction by an imperfectly conducting halfplane at oblique incidence.
- Sepelenko, L. M. 4435: Questions concerning the projective bending of families of planes in P<sub>s</sub>.
- Seppälä, Veikke. 1600: Zur Bernoullischen Biegungstheorie unter
- Zugrundelegung einer nichtlinearen Verformungsfunktion. Serebrjakeva, V. S. 4667: (with Barbašin, E. A.) On circular motions of linked pendula. II.
- Sergienko, V. I. 1208: On the number of classes of iso-order solvable
  - non-special subgroups of finite groups.
- Serman, D. I. = Sherman, D. I.
- Serre, J.-P. 3033: (with Fröhlich, A. and Tate, J.) A different with an odd class.
- Secrin, James. 346: On the interior regularity of weak solutions of the Navier-Stokes equations.
  471: Dirichlet's principle in the calculus of variations.
  1427: Strong convergence in a product space.
  1466: On the definition and properties of certain variational integrals.
  3131: On the differentiability of functions of several variables.

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- Sersinev, A. N. 2467: On the solution of equations in functional deriva-
- Seshadri, C. S. 2066: Variété de Picard d'une variété complète.

Seshu, Lily. 4107: (with Seshu, Sundaram) Bounds and Stieltjes transform representations for positive real functions.

Seshu, Sundaram. 4107: (with Seshu, Lily) Bounds and Stieltjes transform representations for positive real functions.

Sestini, Giorgio. 4259: Sul problema non lineare di Stefan in strati ellindriei o sferici.

Sethi, V. K. 4620: (with Murthy, M. N.) Randomized rounded-off

multipliers in sampling theory.

Sethuraman, J. 676: Conflicting criteria of 'goodness' of statistics. 2626: Some limit theorems for joint distributions.

Sevele, V. N. 2293: (with Stelik, V. G.) Sufficient conditions for the stability of solutions of certain non-linear second-order equations.

Severe, Norman C. 1585: (with Connor, W. S.) Distribution of total service time for a fixed observation interval.

Sevrin, L. N. 3100: On semigroups all of whose subsemigroups are nil-potent. 3101: Nilsemigroups with certain finiteness conditions. 3102: Semigroups whose lattice of subsemigroups has relative complements.

Sexl, Roman U. 1926: Equivalence principle and light deflection. 2823: (with Baumann, K.; Eder, G. and Thirring, W.) On field theories with degenerate ground states.

Shah, B. K. 4599: Estimation of the parameter of the exponential distribution when the data are of the mixed nature (grouped and

Shah, Dao-shing = Shah, Tao-shing.

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Shah, Tae-shing. 195: (with Fan, Le-le) On the modulus of quasiconformal mapping.

Shakuntala, N. S. 3658: (with Krishna Iyer, P. V.) Asymptotic cumulants for distributions of k-state Markov chains.

Shale, David. 956: Linear symmetries of free boson fields.

Shamihoke, A. C. 4478: On Frenet's formulae and curvatures in a generalised Riemann space. 4479: Some properties of curvature tensors in a generalised Finsler space.

Shamir, Eliahu. 3268: Évaluations dans Wo, pour des problèmes aux 4242: Évaluations dans limites elliptiques mixtes dans le plan. Wo.p pour des problèmes aux limites elliptiques mixtes dans le

Shapiro, I. S. = Sapiro, I. S.

Shapiro, Ralph. 4916: (with Ward, Fred) Decomposition and comparison of time series of indices of solar activity.

Sharma, A. 3306: (with Varma, A. K.) Some interpolatory properties of Tohebicheff polynomials (0, 2) case modified. 4283: (with Saxena, R. B.) Some inequalities on polynomials.

Sharma, C. S. 1875: (with Coulson, C. A.) Correction for self-interaction in the Thomas-Fermi potential with application to f electrons in atoms.

Sharma, P. L. 3327: On the harmonic summability of double Fourier series. 5342: On the absolute negative summability of double

Sharma, V. P. 3662: (with Nanda, R. S.) Possible similarity solutions of the boundary layer equations for free convection flow in three

Sharp, David H. 3769: (with Baierlein, Ralph F. and Wheeler, John A.)

Three-dimensional geometry as carrier of information about time. Sharples, A. 927: An approximate method in high frequency scattering. Shawyer, B. L. R. 4277: (with Borwein, D.) On Riesz summability

Shell, Donald L. 5307: On the convergence of infinite exponentials.

Shen, Sing-yao. 4524: On natural systems of  $A_n^2$ -polyhedra. Shenton, L. R. 2664: (with Wallington, P. A.) The bias of moment estimators with an application to the negative binomial distribution. Shepard, Roger N. 3798: The analysis of proximities: multidimensional

scaling with an unknown distance function. I.

Shepp, L. A. 2648: Symmetric random walk. Sherif, Soraya. 5316: (with Kuttner, B.) A relation between Tauberian

Sherk, F. A. 488: A family of regular maps of type {6, 6}. Sherman, Charles H. 1965: (with Russelk, Arnold and Flinchbaugh, David E.) Simple, analytic, atomic wave functions.

Sherman, D. I. 790: The elastic, heavy half-plane, weakened by holes of elliptic shape lying sufficiently close to its boundary.

Sherman, S. 2003: Combinatorial aspects of the Ising model for ferromagnetism. II. An analogue to the Witt identity.

Shibamura, K. 3886: (with Chikawa, K.; Iaéki, K. and Kusakabe, T.) Computation of cyclic parts of Steinhaus problem for power 5. Shimogaki, Tetsuya. 3355: (with Koshi, Shôzô) On quasi-modular

Shinbrot, Marvin. 1414: A class of difference kernel

Shirkov, B. V. = Širkov, D. V.

Shireta, Taira. 4251: Linear hyperbolic partial differential equations. Shisha, O. 173: An extension of Jenson's theorem for the derivative of a polynomial and for infrapolynomials. 174: (with Walsh, J. L.) The zeros of infrapolynomials with some prescribed coefficients.

Shmeys, J. 1778: (with Hessel, A. and Marcuvitz, N.) Scattering and guided waves at an interface between air and a compressible plasma. Shockley, James E. 46: (with Brauer, Alfred) On Diophantine equations of the form  $x^n + y^n = hp^m$ .

Shockley, W. 2876: Diffusion and drift of minority carriers in semiconductors for comparable capture and scattering mean free paths. Shoenfield, J. R. 2957: Degrees of models.

Short, R. A. 1868: (with Elspas, B.) A note on optimum burst-errorcorrecting codes.

Shrikhande, S. S. 703: A note on mutually orthogonal Latin squares Sibirjakov, V. A. 2259: The solution of a differential equation with variable coefficients.

Sibuya, Yasutaka. 3227: On bounded solutions of ordinary differential equations with almost periodic coefficients. 5249: Formal solutions of a linear ordinary differential equation of the nth order at a turning point. 5250: Asymptotic solutions of a system of linear ordinary differential equations containing a parameter.

Siddiqui, M. M. 635: Games associated with a renewal process. 647: Some problems connected with Rayleigh distributions. 648 . Approximations to the moments of the sample median. 4501: Distribution of quantiles in samples from a bivariate population.

Sideriadès, Lefteri. 5229: (with Argemi, José) Sur la singularité multiple définie par les formes quadratiques des systèmes dynamiques plans. Sidlovskii, A. B. 49: Transcendence and algebraic independence of the

values of entire functions of certain classes. 3010: On the transcendence and algebraic independence of the values of certain E-

Siegel, Aaron. 2352: Summability C of series of surface spherical

Siegel, Carl Ludwig. 3906: \*Zur Reduktionstheorie quadratischer Formen.

Siegel, Sidney. 5868: Decision making and learning under varying conditions of reinforcement.

Sieker, K.-H. 3627: Algebraische Formulierung der Mittelpunkt- und Kreispunktkurve und die rechnerische Ermittlung der Burmesterschen Punkte.

Siekmann, Julius. 1347: Note on an integral equation occurring in stagnation point flow.

Sierpiński, W. 1128: Sur quelques conséquences d'une hypothèse de M. A. Schinzel. 2034: Sur les nombres premiers dont tous les chiffres sont égaux à 1. 5027: Sur l'equivalence de deux hypothèses concernant les nombres premiers. 5028: Sur les sommes égales des cubes distincts de nombres naturels.

Sigmond, Reidar Svein. 4780: On the fluctuations in the external reactions of a classical thermodynamical system. I. 4781: On the fluctuations in the external reactions of a classical thermodynamical

Sikerski, Reman. 1454: The determinant theory in Banach spaces. 1455: On the Carleman determinants. 2961: A topological characterization of open theories. 3814: Algebra of formalized

Silin, V. P. 991: (with Ginzburg, V. L. and Ruhadze, A. A.) Correction to the paper "Electrodynamics of crystals and the theory of excitons".

Sil'nikev, L. P. 273: Some instances of generation of periodic motions in n-space. 2295: (with Nelmark, Ju. I.) Application of the smallparameter method to a system of differential equations with discontinuous right-hand sides.

Silev, G. E. 2443: An analogue of a theorem of Laurent Schwartz. e Silva, J. Sebastião. Ses Sebastião e Silva, J.

- e Silva, João Andrade. Sec Andrado e Silva, João.
- da Silveira, Adel. 1802: Unusual eigenvalues of the energy operator.
- Silver, Samuel. 924: Microwave aperture antennas and diffraction theory.
- Silverman, Robert. 4010: A metrization for power-sets with applications to combinatorial analysis.
- Silvey, S. D. 1805: A note on maximum-likelihood in the case of dependent random variables.
- Simeonev, S. V. 3399: A successive approximation process and its application in solving functional equations with non-linear operators of monotonic type.
- Simke, K. I. 1693: (with Vasil'čenko, G. V.) An analogy between the solution of certain problems in the theory of elasticity and in hydrodynamics.
- Simokawa, Y. 768: (with Morita, K.) Nomographic representation of the functional relations of several complex variables.
- Simonenko, I. B. 4112: Riemann's boundary problem with a measurable coefficient.
- Simonnard, M. 1952: \*Programmation linéaire.
- Sinal, Ja. G. 871: (with McSalkin, L. D.) Investigation of the stability of a stationary solution of a system of equations for the plane movement of an incompressible viscous liquid.
- Sindalevskii, G. H. 1248: Continuity and differentiability with respect to congruent sets.
- Sindel, P. 4782: Helligkeits-Koma und Blenden-Koma bei rotationssymmetrischen optischen Systemen. II.
- Singer, I. 3415: Weak \* bases in conjugate Banach spaces. 2416: On Banach spaces reflexive with respect to a linear subspace of their conjugate space. II. 3351: Sur une classe d'applications linéaires continues des espaces  $L_{P}(1 \le p < +\infty)$ .
- Singh, Devi. 1737: On superposable motions on a motion outside a rectilinear vortex filament.
- Singh, H. D. 2538: A generalization of the extension of a covariant differentiation process.
- Singh, Shri Krishna. 201: On exceptional values of entire and meromorphic functions. 219: On the capacity of a set. 1285: A note on entire functions. 4101: On an entire function of order less than one.
- Singhai, B. C. 5313: Approximation to the generating function by the Cesaro means of its ultraspherical series.
- Singleton, R. R. 3857: (with Hoffman, A. J.) On Moore graphs with dismuters 2 and 3.
- Sinha, K. S. 1723: (with Nigam, S. D.) Expansion procedures for the Euler's equations for rotating fluids.
- Šinkar', A. I. 1646: (with Dlugač, M. I.) Solution on electronic computers of symmetrical systems of linear algebraic equations of applied mechanics and the theory of elasticity.
- Sion, Maurice. 1259: Approximate continuity and differentiation.
- Siesen, F. M. 2018: Some primal clusters.
- Siraidinov, S. H. 593: (with Mamatov, M.) A local theorem for densities.
  Birkev, D. V. 5748: (with Bogoliubov, N. N. and Tolmachev, V. V.) 

  A new method in the theory of superconductivity.
- Sirokev, A. P. 3465: Some real realizations of spaces over algebras. 5476: On a class of spaces over algebras.
- Simarev, I. A. 2321: (with  $\Pi'$ in, V. A.) An eigenfunction problem for the operator Lu = div[p(x) grad u] g(x)u with discontinuous coefficients.
- Sitenko, A. G. 2770: (with Ahiezer, A. I. and Ahiezer, I. A.) Contribution to the theory of plasma fluctuations.
- Sian', Din-čan = Hsein, Ding-chang.
- Skačkev, B. N. 279: On the stability of a non-linear system of differential equations.
- Skalafuris, Angele. 1623; (with Whitney, Charles A.) Radiative cooling behind shock fronts in stellar atmospheres.
- Skljareake, E. G. 2574; On the extension of homeomorphisms.

  On the topological structure of factor spaces of locally bicompact groups.

  5122; Infinite-dimensional homogeneous spaces.

  5496;
  On perfect bicompact extensions.
- Skl'jacevich, A. N. 409: Determination of correlation of functions of outputs from linear dynamic systems by means of two-dimensional Laplace transforms.
- Skeblja, N. S. 406: Evaluation of the Mellin integral.

- Skof, Pulvia. 3151: Proprietà delle serie di potenze prolungabili e criteri sufficienti di non prolungabilità. 3152: Famiglie di serie non prolungabili e non lacunari e serie non prolungabili con "tratto ridotto".
- Skelem, Th. 3851: On some combinatorial problems.
- Skopec, Z. A. 5438: A mapping of space onto the plane by means of a fourth-order space curve with a bitangential point.
- Skordev, Dimitŭr. 2424: Some semiordered spaces.
- Skornjakev, G. V. 5630: Some problems of the topology of a magnetic field.
- field.
  Skorobogat'ke, V. Ja. 5264: An extremal principle for a system of second-order differential equations.
- Skerohed, A. V. 4560: Some limit theorems for additive functionals of a sequence of sums of independent random variables.
   4561: The differentiability of measures corresponding to stochastic processes.
   II. Markov processes.
- Skorupski, A. 5685: Boundary conditions for electromagnetic fields in the case of moving media.
- Skowroński, J. 5620: (with Ziemba, S.) Criteria of oscillation of certain dynamic systems.
- Skripnik, V. P. 2286: On a boundary-value problem and certain questions on the oscillatory character of the solutions. 2281: Some criteria for boundedness or unboundedness of solutions of systems of linear differential equations. 2282: Some boundedness criteria for solutions of systems of non-linear differential equations. 4194: Some boundedness criteria for solutions of systems of non-linear and linear differential equations.
- Skubenko, B. F. 5044: (with Linnik, Ju. V.) On the asymptotic behavior of integral matrices of third order.
- Škurba, V. V. 2924: An algorithm for the solution of a general linear programming problem.
- Skuridin, G. A. 1708: An approximate theory for the head wave generated by a cylindrical inclusion in a homogeneous elastic medium.
- Skyrme, T. H. R. 1846: (with Perring, J. K.) A model unified field equation. 1841: A unified field theory of mesons and baryons.
- Slater, L. J. 4981: Wilfrid Norman Bailey.
- Slater, N. B. 4145: General forms of Nielsen's Bessel-function identity.
- Slavnov, D. A. 4823: On the problem of the generalized character of commutator functions. 4824: (with Suhanov, A. D.) On the ambiguity in the definition of the interpolating field.
- Sledd, W. T. 5336: The Gibbs phenomenon and Lebesgue constants for regular Sonnenschein matrices.
- Stedzik, Jan. 1860: Some remarks on collective description of electron interactions. The partition function.
- Slepenčuk, K. M. 2350: The generalized Hölder method of negative
- order.

  Slepian, D. 4146: (with Pollak, H. O.) Prolate spheroidal wave func-
- tions, Fourier analysis and uncertainty. I.

  Steplan, Paul. 5697: (with Woinberg, Louis) Takahasi's results on
  Tchebycheff and Butterworth ladder networks.
- Slezinger, I. N. 808: Application of Castigliano's principle in the theory of flexible elastic plates.
- Sluckin, A. A. 3878: (with Liffsic, I. M. and Nabutovskii, V. M.) Motion of charged quasiparticles in a varying inhomogeneous electromagnetic
- Slugia, S. N. 421: Approximate solution of integro-differential equations by Chaplygin's method. 1379: A replacement method for a linear equation in an abstract-normed space. 1650: Some applications of methods of two-sided approximation.
- Smale, Stephen. 389: Generalized Poincaré's conjecture in dimensions greater than four. 4544: On the structure of 5-manifolds. 5252: On dynamical systems.
- Smatkey, A. A. 4133: Estimates for biholomorphic mappings of bounded
- Smidov, F. I. 1247: The conditions (D) and (N) for functions of one and two real variables. 5142: On functions of one real variable. 5149: Functions satisfying Lusin's N-condition.
- Smiley, M. F. 3420: Von Staudt projectivities of Moufang planes. 3087: A remark on the definition of Jordan homomorphisms.
- Smirney, A. D. 234: \*Tables of Airy functions and special confluent

hypergeometric functions for asymptotic solutions of differential equations of the second order.

nev, M. M. 2312: A boundary-value problem for an elliptic equation degenerating on part of the frontier of the domain.

mirnev, V. I. 5140: Lehrgang der höheren Mathematik. Teil I. 5141: Lehrgang der höheren Mathematik. Teil V.

Smirneva, V. V. 3450: Triplets of T-congruences.

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Smith, G. F. 5637: Further results on the strain-energy function for anisotropic elastic materials.

Smith, J. E. Keith. 638: (with Waugh, Nancy C.) A stochastic model for free recall.

Smith, J. F. 5405: (with Saworotnow, P. P.) On some classes of scalarproduct algebras

Smith, J. Wolfgang. 4645: On integration of quasi-linear parabolic equations by explicit difference methods.

Smith, O. K. 5784: Computation of coordinates from Brouwer's solution of the artificial satellite problem.

Smith, Walter L. 634: On necessary and sufficient conditions for the convergence of the renewal density. 3554: A note on characteristic functions which vanish identically in an interval.

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Williamson, R. E.) A martingale representation theorem. Snew, Barbara A. S. 654: The third moment of Kendall's tau in normal 1620: (with Pearson, E. S.) Tests for rank correlation coefficients. III. Distribution of the transformed Kendall coefficient.

Sobel, M. 5578: (with Rao, U. V. R. and Savage, I. R.) Contributions to the theory of rank order statistics: the two-sample censored case.

Sobociński, Bolesław. 3840: A simple formula equivalent to the axiom of choice. 3841: A note concerning the axiom of choice. Certain formulas equivalent to the axiom of choice. 3843: A theorem on Hartogs' alephs.

Sobol', I. M. 1644: Functions of many variables with rapidly convergent Haar series. 1645: Accurate estimate of the error of multiansional quadrature formulas for functions of class  $S_p$ . Evaluation of infinite-dimensional integrals. 3608: Evaluation of

Sobolev, S. L. 3606: Various types of convergence of cubature and quadrature formulas. 4635: Cubature formulas on the sphere which are invariant under transformations of finite rotation groups. 4636: On the number of nodes of cubature formulae on a sphere. 4637: The formulas of mechanical cubature on the surface of a sphere.

Sobolev, V. I. 5361: (with Liusternik, L. A.) \*Elements of functional 5362: (with Lusternik, L. A.) \*Elements of functional analysis.

Sobolev, V. J. = Sobolev, V. I.

Sobolevskii, P. E. 311: Green's functions of arbitrary (in particular, integer) powers of elliptic operators. 3282: On the smoothness of eneralized solutions of the Navier-Stokes equations. 5291: Local and nonlocal existence theorems for nonlinear second-order parabolic 5297: Equations of parabolic type in a Banach space.

Takashi. 1077: (with Sawaragi, Yoshikazu and Sunahara, Yeshifumi) The discrepancy from the normal distribution of the probability of the response of non-linear control systems subjected to a Gaussian random input. 1678: (with Sawaragi, Yoshikazu and Sunahara, Yoshifumi) Some general results on the statistical respons of non-linear control systems by the theory of sampling distribution.

conception of the gravitational field. 5778: (with Brodskii, A. M. and Ivanenko, D.) A new treatment of the gravitational field.

Sokolowski, Marek. 1676: Some problems of a plate strip with discontinuous boundary conditions.

Soldini, Michel. 4681: (with Schumann, Walter) Sur deux applications d'une loi de seconde approximation régissant la déformation d'un sol

Selecki, Roman. 814: Solution générale du problème d'une plaque rectangulaire orthotrope.

Selian, Alexandru. 1203: Abstract group and transformation group.

Solneev, Ju. K. 445: An estimate for a mixed derivative in  $L_p(G)$ .

Solohovič, F. A. 289: Linear dynamical systems.

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Solemešč, I. A. 4239: The asymptotic behavior of eigenvalues of bilinear forms associated with certain elliptic equations which degener-

Solomjak, M. Z. 1442: On the spaces conjugate to the  $W_p^i$  spaces of S. L. Sobolev. 4235: Elliptic operators on two-dimensional manifolds.

Solomen, Herbert. 591: On the distribution of quadratic forms in normal variates.

Solomon, Liviu. 4682a: On Saint-Venant's problem. I. 4682b: On Saint-Venant's problem for multiply-connected cross-sections. II. 4682c: On Saint-Venant's problem. III. Determination of cantilever torsion and of the centre of flexure by means of torsion functions.

Solemon, Louis. 2125: On Schur's index and the solutions of G=1 in a finite group.

Solonnikov, V. A. 444: (with Golovkin, K. K.) Imbedding theorems for fractional spaces. 4047: A simple proof of an inequality of Hardy and Littlewood for fractional integrals.

Solow, Robert M. 1950: On a family of lag distributions.

Som, M. M. 1922: (with Raychaudhuri, A. K.) Stationary cylindrically symmetric clusters of particles in general relativity. 5776: Does the cylindrically symmetric gravitational wave pulse carry energy? Sendheimer, E. H. 3764: The Boltzmann equation for anisotropic

Soo, Shao L. 5701: (with Besant, Robert W. and Sarafa, Zuhair N.) The nature of heat transfer from an enclosed rotating disk.

Sophie, Madeleine. 3987: A note on the groups of order thirty-two. Sorkin, Ju. I. 4998: Algorithmic solvability of isomorphism problems

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Soubbaramayer. 4745: Possibilité d'un choc sans collision dans un schéma à deux fluides.

Spaček, Antonin. 8: Statistical estimation of semantic provability. Spain, Barry. 1478: \*Analytical quadries.

Spanier, J. 737: A unified approach to Monte Carlo methods and an

application to a multigroup calculation of absorption rates.

Šparo, D. I. 2635: (with Sur, 'G.) On the distribution of roots of random polynomials.

Spearman, T. D. 5730: (with Kennedy, J.) Singularities in partialwave amplitudes for two ingoing and two outgoing particles.

Specht, Wilhelm. 4058: Zur Theorie der messbaren Gruppen.

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Speiser, David. 952: (with Finkelstein, David; Jauch, Josef M. and Schiminovich, Samuel) Foundations of quaternion quantum mechanics. 3741: (with Radicati, L. A.) Global symmetries and selection rules for weak interactions

Spencer, A. J. M. 4451: (with Rivlin, R. S.) Isotropic integrity bases for vectors and second-order tensors. I.

Spera, Angela M. 2046: (with Bacchiani, Romana) Sui grandi divisori primi dei polinomi di esponenziali a coefficienti interi.

Sperner, Emanuel. 5445: (with Ellers, Erich) Einbettung eines desarguesschen Ebenenkeimes in eine projecktive Ebene.

Spira, Robert. 3006: The Diophantine equation  $x^2 + y^2 + z^2 = m^2$ .

Sokolik, G. A. = Sokolik, H. A.

Sokolik, H. A. 3768: (with Brodskii, A. M. and Ivanenko, D.) A new Spitzer, Frank. 2655: Hitting probabilities. 5552: Recurrent random

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Spitzer, Richard. 4805: Spin and statistics with an indefinite metric. Spivak, M. A. 525: Algebraic theory of coordinate structures and

geometric objects.

Spreiter, John R. 4924: (with Briggs, Benjamin R.) Theory of electrostatic fields in the ionosphere at polar and middle geomagnetic

Springer, T. A. 2104: Characterization of a class of cubic forms. 3942: Note on quadratic forms in characteristic 2. geometric algebra of the octave planes. 5440: The projective octave plane

Sprett, D. A. 1602: Similarities between likelihoods and associated distributions a posteriori.

Spruch, Larry. 971: (with O'Malley, Thomas F. and Rosenberg, Leonard) Low-energy scattering of a charged particle by a neutral polarizable 1823: (with Bartram, Ralph) Bounds on elements of the S matrix for elastic scattering: one-dimensional scattering.

Sretenskii, L. N. 4708: Wave resistance of a ship in the presence of internal waves.

Sridharan, R. 109: (with Gopalakrishnan, N. S. and Ramabhadran, N.) A note on the dimension of modules and algebras.

Srikantan, K. S. 693: Recurrence relations between the pdf's of order statistics, and some applications.

Srinivasacharyulu, Kilambi. 1560: Sur la déformation de certaines variétés complexes. 2620: (with Norguet, François) Sur certaines surfaces analytiques complexes compactes.

Srinivasan, C. V. 780: State diagram of linear sequential machines. Srivastav, R. P. 1282: A note on a class of integral functions.

Srivastava, K. J. 2277: Complex convolution applied to nonlinear

Srivastava, K. N. 2338: The iteration of entire functions defined by Dirichlet series and the solutions of the functional equation F(s) =

Srivastava, R. S. L. 2204: On the order and type of integral functions. 2205: On the derivatives of the maximum term of an integral function. Srivastava, Satya Narain. 2286: On the order and type of integral

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Veblen dans les espaces de Kawaguchi spéciaux. Stachowiak, H. 2779: The solution of the equation of electric conduc-

tivity for a thin plate in an arbitrary magnetic field for a non-constant temperature distribution.

Stadtlander, D. P. 5501: (with Davis, H. S. and Swingle, P. M.) Properties of the set functions Ta.

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Stearns, R. E. 5822: (with Hartmanis, J.) On the state assignment problem for sequential machines. II.

Stecenko, V. Ja. 428: K-regular cones. 2451: (with Bahtin, I. A. and Krasnosel'skil, M. A.) On the continuity of positive linear

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Stein, Karl. 2230: (with Ramspott, Karl-Josef) Über Rungesche Paare komplexer Mannigfaltigkeiten.

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Steinberg, A. S. 1392: (with Remez, É. Ja.) On some extremal problems of generalized Čebyčev type and the method of equalizing descent.

Steinberg, Robert. 5107: Complete sets of representations of algebras. Steinberg, T. S. 3224: The small-parameter method for differential equations with discontinuous terms.

Steinbuch, Karl. 2937: \*Automat und Mensch. Über menschliche und maschinelle Intelligenz

Steinhaus, H. 3850: (with Mycielaki, Jan) A mathematical axiom contradicting the axiom of choice.

Stelik, V. G. 2293: (with Sevelo, V. N.) Sufficient conditions for the stability of solutions of certain non-linear second-order equations.

Stemmler, Rosemarie M. 2059: (with Bateman, Paul T.) Waring's problem for algebraic number fields and primes of the form  $(p^r-1)/(p^d-1)$ . Stenberg, Warren. 1384: On rearrangements of infinite series

Stender, P. V. 3979: On primitive elements in a free group of rank 2. Stenström, V. 417: Sur une certaine classe d'équations intégrales singulières

Stepanov, A. V. 1818: (with Kazarnovskii, M. V.) Theory of resonance scattering on atomic systems.

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Stern, Raya. 5670: (with Goodman, Ralph R.) Reflection and transmission of sound by elastic spherical shells.

Stetter, Hans J. 1653: On the convergence of characteristic finitedifference methods of high accuracy for quasi-linear hyperbolic

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Stewart, R. W. 5653: (with Longuet-Higgins, M. S.) Radiation stress and mass transport in gravity waves, with application to 'surf beats'. Stewart, Thomas E. 4030: (with Palais, Richard S.) The cohomology of differentiable transformation groups.

Stiefel, E. 758: Altes und Neues über numerische Quadratur.

Stillinger, Frank H., Jr. 3753: Some remarks on correlations in classical order-disorder phenomena.

Stöckel, Helmut. 5690: Die exakte, geschlossene Lösung für die Beugung einer ebenen, elektromagnetischen Welle am Spalt.

Stocker, P. M. 5664: (with Mauger, F. E.) Supersonic flow past cones of general cross-section.

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Stokes, Arnold P. 1664: (with Hale, Jack K.) Some physical solutions of 5255: A Floquet theory for functional Dirac-type equations. differential equations.

Stoljarev, N. A. 2150: A theorem on difference quotients.

Stell, W. 4129: (with Bojanic, R.) A characterization of monomials.

Stolzenberg, Gabriel. 3194: An example concerning rational convexity. Stone, A. H. 1535: †Absolute Fo spaces

Stone, Jeremy J. 1963: Multiple burst error correction.

Stone, M. H. 178: Hilbert space methods in conformal mapping. Stonic'kil, A. A. 2403: On the asymptotic representation of the solution

of a mixed problem for a class of integro-differential equations with a small parameter.

Storchi, Edoardo. 5660: Sull'esistenza di moti variabili dei fluidi perfetti comprimibili nei quali la densità è stazionaria

Strahov, V. N. 5794: Methods for calculating the analytic continuation of potential fields. I. 5795a: Numerical methods of calculating the analytic continuation of potential fields. II. for calculating the analytic continuation of potential fields. III.

Strang, Gilbert. 5318: Polynomial approximation of Bernstein type.

- Stratenovič, R. L. 613: Conditional Markov processes. ditional Markov processes in problems of mathematical statistics and dynamic programming.
- Straus, A. V. 454: Self-adjoint operators in an orthogonal sum of Hilbert spaces. 4363: Characteristic functions of linear operators. Straus, E. G. 3038: (with Carlitz, L.; Lowis, D. J. and Mills, W. H.)

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- Polynomials over finite fields with minimal value sets. Streater, R. F. 968: Analytic properties of products of field operators.
- Strelic, S. I. = Strelicas, S. Strelicas, S. 4127: The theorem of Wiman and Valiron for entire
- functions of several complex variables. Strodt, Walter. 3934: On the algebraic closure of certain partially
- ordered fields. Stroffolini, R. 4815: (with Bertocchi, L.; Fubini, S. and Tonin, M.)
- Some remarks on the relativistic two-body equation. Stroh, A. N. 2740: Steady state problems in anisotropic elasticity.
- Ströher, Wolfgang. 4660: Zur Kinematik der flächentreuen Affinitäten mit fixem Ursprung.
- Stremmer, J. 2472: Vereinfachung des hyperbolischen Parallelen-5436: Ein elementarer Beweis der Kreisaxiome der hyperbolischen Geometrie.
- Strubecker, Karl. 3441: Eine neue Erzeugung der Minimalfläche von 3442: Berichtigung zu der Note über "Eine neue Erzeugung der Minimalfläche von Enneper". 4661: Beitrag zur kinematischen Abbildung.
- Struble, Raimond A. 274: (with Yionoulis, Steve M.) General perturbational solution of the harmonically forced Duffing equation. (with Fletcher, John E.) General perturbational solution of the harmonically forced van der Pol equation. 1670: On the simple pendulum under periodic disturbance.
- Stuart, J. T. 3659: (with Segel, L. A.) On the question of the preferred mode in cellular thermal convection.
- Stuart, R. D. 1399: \*An introduction to Fourier analysis.
- Stuiver, W. 791: On the application of variational methods to initial value problems in dynamics.
- Sturrock, P. A. 1826: Field-theory analogs of the Lagrange and Poincaré invariants.
- Suárez, Juan José Gutiérrez. Sec Gutiérrez Suárez, Juan José.
- Subbarao, M. V. 43: The algebra of biquadratic residues. (with Gioia, A. A. and Sugunamma, M.) The Scholz-Brauer problem in additional chains.
- Subbotovskaja, B. A. 1988: Realization of linear functions by formulas using V, &,
- Subhankulov, M. A. 3305: Some general Tauberian theorems with 5045: Additive properties of certain sequences remainder term.
- Sudakov, V. N. 2441: (with Pelczyński, A.) Remark on non-complemented subspaces of the space m(S). 3139: Extension of measures from Baire sets in non-separable linear metric spaces.
- Sudarshan, E. C. G. 5728: (with Schweber, Silvan S.) Asymptotic field operators in quantum field theory.
- Suetin, P. K. 4116: Direct and inverse theorems on the degree of best approximation of closed curves by lemniscates. 5326: On the degree of approximation of analytic functions by partial sums of series of orthogonal polynomials.
- Sugai, Narinobu. 1979: (with Sawaragi, Yoshikazu) Accuracy considerations of the equivalent linearization technique for the analysis of a non-linear control system with a Gaussian random input.
- Sugawara, M. 4839: (with Kanazawa, A.) N/D method.
- Sugiyama, Akira. 4864: (with Inoue, Tutomu) Theory of nuclear surface on the basis of the Fermi gas model.
- Sugunamma, M. 3898: (with Gioia, A. A. and Subbarao, M. V.) The Scholz-Brauer problem in addition chains.
- Suh, Tae-Il. 2516a: On isomorphisms of little projective groups of Cayley planes. I. 2510b: On isomorphisms of little projective groups of Cayley planes. II.
- Suhadole, A. 2454: (with Ribarie, M.) On the integral operator Kf=
- ov, A. D. 4824: (with Slavnov, D. A.) On the ambiguity in the definition of the interpolating field.

- Sujaršaev, A. M. 246: (with Kukles, I. S.) Generalization of the method
- of Frommer for equations with quasi-analytic right-hand sides.

  8ujunikaliev, N. H. 5631: The differential equations of elastic-plastic vibrations of thick plates.
- Sul'gina, L. T. 3607: (with Krylov, V. I.) On the convergence of a quadrature process.
- man, B. M. 1354: (with Kuhtenko, O. I.) Invariance conditions for linear systems with variable parameters.
- Sunahara, Yoshifumi. 1676: (with Sawaragi, Yoshikazu and Nakamizo, Takayoshi) Statistical behaviors of the response of non-linear control systems subjected to random inputs. 1977: (with Sawaragi, Yoshikazu and Soeda, Takashi) The discrepancy from the normal distribution of the probability of the response of non-linear control systems subjected to a Gaussian random input. Sawaragi, Yoshikazu and Sodea, Takashi) Some general results on the statistical response of non-linear control systems by the theory of sampling distribution.
- Sunouchi, Gen-ichirô. 2376: On the class of saturation in the theory of approximation. III. 2377: Characterization of certain classes of functions. 5332: Local operators on trigonometric series.
- Supnick, Fred. 1487: Contiguous sphere clusters. I. Isomorphic chains. 4403: (with Keston, Jeanette F.) On the rational triangulation of a
- Suprunenko, D. A. 124: (with Tyškevič, R. I.) Reducible locally nilpotent, linear groups. 125: †The condition of complete reducibility of a solvable linear group. 2127: Periodic, linear, locally nilpotent 5111: On solvable subgroups of the multiplicative group
- Sur, M. G. 2635: (with Sparo, D. I.) On the distribution of roots of random polynomials. 3264: The Martin boundary for linear, second-order elliptic operators.
- Sura-Bura, M. R. 5608: (with Kamynin, S. S. and Ljubimskil, E. Z.) Programming for automatization of programming.
- Surdin, M. 4911: A note on time-varying gravitational potentials.
- Surin, S. S. 4932: (with Rubinstein, G. S. and Gavurin, M. K.) On the optimal utilization of production resources in fulfillment of several types of jobs (Generalized transportation problem).
- Suryanarayana, P. 5374: Some complete sequences in normed linear прасев.
- Suryaprakasarae, U. 2768: The response of laminar skin friction, temperature and heat transfer to fluctuations in the stream velocity in the presence of a transverse magnetic field. I.
- Sussman, Steven M. 1665: A matched filter communication system for multipath channels.
- Suvalov, N. K. 1975: ★Program regulation systems functioning on a combination principle.
- Suzuki, Michie. 112: On a class of doubly transitive groups. On a finite group with a partition. 2117: On generalized (ZT)groups,
- Suzuki, Takeji. 3576: On a queuing process with service depending on queue-length.
- Svare, A. S. 572: (with Fuks, D. B.) On the homotopy theory of functors in the category of topological spaces. 5517: On the homotopy theory of fiber space
- Svec, Aleis. 4441: Sur la géométrie différentielle d'une surface plongée dans un espace à trois dimensions à connexion projective. (with Čech, Eduard) Quelques travaux de géométrie différentielle.
- Svenonius, Lars. 1986a: Re-categoricity in first-order predicate calculus. 1986b: A theorem on permutations in models. 1986c: On minimal models of first-order systems. 1986d: \*Some problems in logical model-theory.
- Swaminathan, S. 3563: Paracompactness conditions in subsets.
- Swamy, P. S. 713: On the amount of information supplied by censored samples of grouped observations in the estimation of statistical
- Swan, P. 2802: Distorted wave expansion for scattering problems. 4862: Distorted wave approximation for tensor force interactions.
- Swan, Richard G. 2131: Induced representations and projective modules. 3066: Projective modules over group rings and maximal orders.

- Swanson, C. A. 339: Asymptotic estimates for limit circle problems. Sweet, R. F. 5782: (with Ivash, E. V.) Mass anisotropy and planetary motion.
- Swerling, P. 1966: (with Reed, I. S.) Filterless approximations of kth order to coherent detection.
- Swetharanyam, S. 54: Asymptotic expressions for certain type of sums involving the arithmetic functions in the theory of numbers.
- Swiatkowski, Tadeusz. 3162: Sur les fonctions holomorphes qui prennent dans le cercle unité une infinité de fois chacune de leurs valeurs. 3163: Sur les séries univalentes lacunaires.
- Swieca, J. A. 957: (with Güttinger, W.) Quantum field theories at small distances.
- Świerczkowski, S. 1236: (with Cole, A. J.) On a class of non-measurable groups. 2017: On isomorphic free algebras. 3880: A sufficient condition for independence. 4027: Measures equivalent to the Haar measure. 5101: (with Hulanicki, A.) On group operations other than xy or yx.
- Swingle, P. M. 5501: (with Davis, H. S. and Stadtlander, D. P.) Properties of the set functions T<sup>n</sup>.
- Swinnerton-Dyer, H. P. F. 3413: Two special cubic surfaces.
- Swokowski, E. W. 5981: (with Feller, E. H.) On ring extensions for completely primary noncommutative rings.
- Syöev, V. V. 885: On hypersonic flows of viscous heat-conducting gases.

  Synge, J. L. 2333: On a certain non-linear differential equation.

  2896: (with Florides, P. S.) Notes on the Schwarzschild line-element.
- 4909: Gravitational waves in the second approximation.

  Syrmus, T. = Sōrmus, T.
- Szablewski, W. 1744: Das Verhalten wellenförmiger Störungen einer ebenen Poiseuilleschen Strömung bei kleinem Parameter Re  $\alpha$ .
- Szamkolowicz, L. 23: Remarks on the Cartesian product of two graphs.

  5441: On the problem of existence of finite regular planes.
- Szamesi, G. 4785: A covariant formulation of quantum mechanics. I.
  Szaniawski, Klemens. 5799: Some remarks concerning the criterion of rational decision making.
- Snarski, J. 3455: (with Aronszajn, N. and Krzywicki, A.) A unique continuation theorem for exterior differential forms on Riemannian manifolds.
- Smass, F. 3062: Die Ringe, deren endlich erzeugbare echte Unterringe Hauptrechtsideale sind. 3063: An observation on the Brown-McCov radical.
- Szász, Gáber. 2011: \*Einführung in die Verbandstheorie.
- Srám, Levente. 2847: Atomic many-body problem. I. General theory of correlated wave functions.
- Scies, Paul. 2480: On a maximum-property characterizing the angles of a triangle.
- Succarba, R. H. 567: The homology of twisted cartesian products.
   4547: (with Auslander, L.) Characteristic classes of compact solvmanifolds.
   4548: (with Massey, W. S.) Line element fields on manifolds.
- Szegő, G. 1267: (with Turán, P.) On the monotone convergence of certain Riemann sums. 4115: On positive harmonic polynomials.
- Szekeres, G. 5302: Fractional iteration of exponentially growing functions. 5303: (with Morris, K. W.) Tables of the logarithm of iteration of e<sup>s</sup>-1.
- Szép, J. 2119: (with ItA, N.) Über die Quasinormalteiler von endlichen Gruppen.
- Szépfalusy, P. 1886: (with Ladányi, K.) An approximate solution of a generalized statistical model.
- Sneptycki, P. 2439: A remark on an imbedding theorem of Kondrashev type.
- Semydt, Z. 217: On a certain boundary problem for Laplace equation.
  3191: Propriétés intégrales du potentiel logarithmique et ses applica-
- Taberski, R. 4300: Summability with Korovkin's factors.
- Tabueva, V. A. 265: (with Barbašin, E. A.) Pendulum oscillations with dry friction. 2299: Conditions for the existence of a periodic solution of a third-order differential equation.
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flat K-spaces. 3489: On infinitesimal conformal and projective transformations of compact K-spaces. 4474: On automorphisms of certain compact almost-Hermitian spaces. 4475: (with Ketō, Satoshi) On almost-analytic functions, tensors and invariant subspaces.

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- Tacunjak, P. I. 3715: Jost points in a two-dimensional quantum field theory.
- Tadjbakhah, I. 833: (with Keller, J. B.) Strongest columns and isoperimetric inequalities for eigenvalues.
- Taffara, L. 3725: (with Minguzzi, A.) Dispersion relations and stability conditions. 3726: (with Minguzzi, A.) Axiomatic dispersion relations and anomalous thresholds.
- Tafs, Earl J. 2103: Cleft algebras with operator groups. 3958: Uniqueness of invariant Wedderburn factors. 5092: Cohomology groups of algebras as group modules.
- Taga, Yasushi. 1643: (with Komazawa, Tutomu) Some remarks on the solutions of algebraic equations based on the method for unitary transformations of the companion matrices.
- Taiclin, M. A. 5137: Relatively elementary subspaces in compact Lie algebras.
- Talkov, L. V. 175: On sets of convergence of Taylor series. 5339
  On summation methods for Taylor series.
- Tairova, V. G. 2193: On "Streckenkomplexe" of closed Riemann sur-
- faces of genus zero.

  Takabayasi, T. 2837a: Internal algebra of elementary particles and interactions.

  2837b: Internal algebra of baryons and recome and
- interactions. 2837b: Internal algebra of baryons and mesons and the structure of strong interactions.
- Takács, Lajos. 628: The transient behavior of a single server queueing process with recurrent input and gamma service time. 1586: A generalization of the ballot problem and its application in the theory of queues. 2651: A single-server queue with Poisson input. 2652: A single-server queue with recurrent input and exponentially distributed service times. 4580: The time dependence of a single-server queue with Poisson input and general service times.
- Takahashi, Ken-ichi. 5230: Die Besselsche Differentialgleichung und eine lineare Differentialgleichung dritter Ordnung mit einen Wendepunkt.
- Takahashi, Shigeru. 4279: An asymptotic property of a gap sequence 4296: (with Matsuyama, Noboru) The law of the iterated logarithms.
- Takahashi, Y. 3766: (with O'Raifeartaigh, L.) Further investigations on the non-local convergent field theory. 4869: A canonical formalism with a linear supplementary condition. I. 4870: A canonical formalism with a linear supplementary condition. II.
- Takahasi, Ken-iti = Takahashi, Ken-ichi.
- Takano, Kazuo. 1514a: Affine motion in non-Riemannian K\*-spaces.
   IV. 1514b: Affine motion in non-Riemannian K\*-spaces.
   V. 3456: The non-holonomic concept and its applications.
- Takasu, Tsurusaburo. 527: Extended affine principal fibre bundles. 2536: Extended projective geometry obtained by extending the group parameters to functions of coordinates. I.
- Takazawa, Takao. 2099: (with Tominaga, Hisso) On a simple ring with a Galois group of order  $p^s$ .
- Takeda, Gyo. 4857: Isotopic spin and strange particles.
- Takeda, Zirê. 4374: On the extension theorem of the Galois theory for finite factors.
- Takeno, Hyôtirô. 3783: Some plane wave-like solutions of nensymmetric unified field theory.
- Takesaki, Masamichi. 2465: (with Tomiyama, Jun) Application of fibre bundles to the certain class of O\*-algebras.
- Takeuchi, H. 4923: Torsional oscillations of the Earth.
- Takeuchi, K. 2667: On a fallacy of Gunnar Blom's theorem
- Takeuti, Gaisi. 1994: Remarks on Cantor's Absolute. II. 1995 On the fundamental conjecture of GLC. VI.
- Talaljan, A. A. 2213: (with Mergeljan, S. N.) On a class of pointwise discontinuous functions.
- Tallini, Giuseppe. 4413: Sulle ipersuperficie irriducibili d'ordine minimo che contengono tutti i punti di uno spazio di Galois  $S_{r,q}$ .
- Talwar, S. P. 902: Helmholtz instability in hydromagnetics
- Tamagaki, Ryono. 5737: (with Otsuki, Shoichiro and Watari, Wataro)
  Two-nucleon potential with full recoil. III. Detailed discussions on
  its characteristic features.

- Tamagawa, T. 3669: (with Mostow, G. D.) On the compactness of | Temljakov, A. A. 221: Integral representations for meromorphic arithmetically defined homogeneous spaces.
- Tamano, Hisahiro. 552: On paracompact spaces. 5489: On compactifications.

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- Tamari, D. 5018: (with Ginzburg, A.) Representation of multiplicative systems by families of binary relations. I.
- Tammai, T. 3298: (with Baron, S.) Summability factors for the Cesaro method of negative order.
- Tammi, Olli. 2176: On a method of extremalization in the class  $S_k$  of
- Tamura, Takayuki. 1230: (with Merkel, R. B. and Latimer, J. F.) Note on the direct product of certain groupoids. 2138: Certain characterization of singular semigroups. 3112: Note on  $\Gamma^*$ -semigroups. 4014: On semigroup whose subsemigroup semilattice is the Boolean algebra of all subsets of a set.
- Tanabe, Hiroki. 4366: Evolutional equations of parabolic type. 4367: (with Kato, Tosio) On the abstract evolution equation.
- Tanderi, Kárely. 387: Über Approximationen mit allgemeinen Orthogonalreihen. 388: Sur la convergence inconditionnelle des séries orthogonales. 2374: Über die Divergenz der Orthogonalreihen.
- Tang, D. T. 2932: Communication networks with simultaneous flow requirements.
- Tangherlini, F. R. 1005: An introduction to the general theory of relativity.
- Tanner, J. C. 2923: A theoretical analysis of delays at an uncontrolled intersection
- Tao, L. N. 1775: (with Joseph, D. D.) Fluid flow between porous rollers. Tae, Yeke. 3515: On fixed point free involutions of  $S^1 \times S^2$ .
- Tarski, Jan. 4844: (with Cook, L. F., Jr.) Some properties of the fivepoint function in perturbation theory.
- Tartakovskii, B. D. 824: (with Maslov, V. P.) Transmission of bending waves through an intermediate rod with los
- Tassi, G. 2749: (with Rózsa, P.) Eine Matrizenmethode zur Lösung statisch unbestimmter Systeme im elasto-plastischen Bereich.
- Tassie, Lindsay J. 4789: (with Peshkin, Murray) Symmetry theory of the Aharonov-Bohm effect: Quantum mechanics in a multiply connected region.
- Tatarkiewicz, Krzysztof. 2285: Deux thécrèmes sur la convergence exponentielle des solutions de l'équation du second ordre.
- Tatarskil, V. I. 423: The primitive functional and its application to the integration of some equations with functional derivatives.
- Tate, John. 2068: Principal homogeneous spaces for Abelian varieties. 3033: (with Fröhlich, A. and Sorre, J.-P.) A different with an odd class.
- Tatsuuma, Nobuhiko. 4035: Decomposition of representations of the three-dimensional Lorentz group. 4036: Decomposition of Kronecker products of representations of the inhomogeneous Lorentz
- Tatuzawa, Tikao. 5042: On Bertrand's problem in an arithmetic pro-
- er, M. J. 1842: (with Charap, J. M.) The field theoretic definition of the nuclear potential. III.
- Tausaky, O. 65: (with Dade, E. C. and Zassenhaus, H.) On the sen group of ideal classes in an order of an algebraic number field. 1174: Commutators of unitary matrices which commute with one factor. 3962: (with Dade, E. C. and Zassenhaus, H.) On the theory of orders, in particular on the semigroup of ideal classes and genera of an order in an algebraic number field.
- Taylor, A. W. B. 3750: Dispersion relations for superconductors.
- Taylor, Angus E. 5383: (with Derr, John) Operators of meromorphic type with multiple poles of the resolvent.
- Taylor, G. I. 3650: Standing waves on a contracting or expanding
- Taylor, J. G. 3735: Analyticity and crossing for partial waves.
- Taylor, R. J. 4624: (with David, H. A.) A multi-stage procedure for the selection of the best of several populations.
- Teixeira, Mário Tourasse. 4995: Recursive functions and the foundations of mathematics.
- Temkin, A. 3701: Nonadiabatic theory of electron-hydrogen scattering. Temko, K. V. 390: Riesz arithmetic means in the theory of trigonometric series. 4121: †Convex capacity and Fourier series.

- functions
- Temple, G. 2171: Characteristic forms in geometric integration theory. Tenenbaum, M. M. 3685: Concerning the method of stationary phase.
- Teodorescu, P. P. 1684: Sur le problème du parallélépipède élastique. 2730: Fonctions de tension dans le problème tridimensionnel de la théorie de l'élasticité. 2731: Stress functions in a planar problem 4675: Sur les équations du problème plan de in elasticity theory. la théorie de l'élasticité en coordonnées curvilignes quelconques. 5627: On the plane problem of elasticity in oblique coordina 5628: On the plane problem of elasticity of some aeolotropic bodies.
- Terasaka, Hidetaka. 5510: (with Hosokawa, Fujitsugu) On the unknotted sphere  $S^2$  in  $E^4$ .
- Terasaki, Richard M. 760: Analog computation of Green's function for integrating two-point boundary value problems.
- Teregulev, I. G. 5632: On the formulation of refined theories of plates and shells. 5633: Convergence of the method of successive approximations in a problem in the non-linear theory of shells.
- Ter-Mkrtič'jan, L. N. 4679: Some problems in the theory of elasticity of nonhomogeneous elastic media.
- Terpigoreva, V. M. 5174: Extremal problems for Orlicz classes of analytic functions in the unit circle.
- Terracini, Alessandro. 1501: Sur une classe particulière de surfaces réglées.
- Terreaux, Ch. 5785: Isobaric space operators from a generalized factorization of the restricted Lorentz group.
- Teterev, A. G. 3336: Positive solutions of integral equations.
- Tevradze, G. N. 529: On a Codazzi quasi-euclidean pair of adjoint connections. 1504: On intrinsic geometric surfaces in projective space induced by lines of a canonical bundle. 1505: On the Weyl and Riemann geometries induced on a surface by the lines of a canonical bundle.
- Thalberg, Olaf M. 2407: Theorems on algebraic curves in connection with the fundamental theorem of Max Noether.
- Thatcher, A. B. 1048: Some results on inventory problems.
- Theodorescu, Radu. 4565: (with Ciucu, George) \* Chains with complete connections.
- Thiele, Ernst-Jochen. 3817: Die Verträglichkeit der Kontinuumhypothese mit dem System der Mengenlehre von Zermelo-Fraenkel.
- Thierrin, G. 3067: Sur les anneaux partiellement ordonnés. Extensions radicales et quasi-radicales dans les anneaux.
- Thirring, Walter. 1843: (with Henley, Ernest M.) ★Elementary quan-2823: (with Baumann, K.; Eder, G. and Sexl, R.) tum field theory. On field theories with degenerate ground states. compound particles. 4809: Lagrangian formulation of the Zachariasen model. 4878: (with Schwabl, F.) A simple theory of superconductivity.
- Thom, René. 4454: Sur la théorie des enveloppes.
- Thomas, Emery. 2603a: (with James, Ioan) On homotopy-commuta-2603b: (with James, Ioan) Homotopy-commutativity in 3526: (with Browder, W.) Axioms for the generalrotation groups. ized Pontryagin cohomology operations. 4543: The torsion Pontryagin classes
- Thomas, Ivo. 7: (with Orth, Don) Axioms for the "Gergonne"-relations. Thomas, J. B. 1977: (with Wong, E.) On the multidimensional prediction
- and filtering problem and the factorization of spectral matrices. 4943: (with Wolf, J. K.) On the statistical detection problem for 5527: (with Wong, Eugene) The distribution of multiple signals. quadratic functionals.
- Thomas, T. Y. 2996: On the propagation and decay of gravitational 2907: The role of gravitation in the creation of matter. waves. 5777: On the concept of rigidity in the theory of relativity.
- Thompson, G. L. 1935: (with Levy, F. K. and Wiest, J. D.) Multiship, multishop, workload-smoothing program. 5801: (with Cyert, R. M. and Davidson, H. J.) Estimation of the allowance for doubtful accounts by Markov chains.
- Thompson, J. R. 1785: Radio propagation over a sectionally homogeneous cylindrical surface.
- son, R. C. 4002: Commutators of matrices with coefficients from the field of two elements.

Thornton, Philip R. 5658: (with Ostrach, Simon) Stability of compressible boundary layers induced by a moving wave.

Thorp, E. 0. 3507: Generalized topologies for statistical metric spaces. Thren, W. J. 1335: (with Schuske, Georgellen) On periodic infinite radicals. 1529: (with Aull, C. E.) Separation axioms between  $T_0$  and  $T_1$ .

Thurston, George B. 1709: (with Wu, Shi-Yu) Dilatational-wave transmission through a viscoelastic layer at normal incidence.

Thwaites, B. 5649: The aerodynamic theory of sails. I. Two-dimensional sails.

Tibiletti, Cesarina Marchionna. See Marchionna Tibiletti, Cesarina.

Tideman, Magnus. 788: Remarks on the inertia instability of a rolling missile.

Tihenev, A. N. 4642; (with Samarskil, A. A.) A best homogeneous difference scheme.

Tihonov, V. I. 3690: The Markov-process nature of the envelope of quasi-harmonic fluctuations.

Tillmann, Heinz Günther. 2442: Darstellung der Schwartzschen Distributionen durch analytische Funktionen.

Timan, M. F. 1400: Some linear summation processes for Fourier series and best approximation. 2361: Best approximation and modulus of smoothness of functions prescribed on the entire real axis.

Timeshenko, S. 1671: (with Goodier, J. N.) \*Theory of elasticity. Timešin, Ju. V. 1029: On the theory of grouping.

Timpner, Fred F. 1641: An iterative method for finding the quadratic factors of a fourth-degree polynomial.

Ting, Tsuan Wu. 308: On the solution of  $\Delta u - q(x)u = f(x, y)$  over a rectangular domain. 3433: Note on the normal deformation of a surface.

Tiomne, J. 4903: (with de Oliveira, C. G.) Representations of Dirac equation in general relativity.

Tipel, N. 2756: (with Constantinescu, V. N.) Généralisation de l'équation de Reynolds à l'étude de la lubrification en régime turbulent.

Tirskii, G. A. 3667: Sublimation of a blunt body near the critical point in a plane or axisymmetric stream of a mixture of gases. 4715: Melting of a body in the vicinity of the critical point in a plane or axisymmetric stream of gas.

Titchmarsh, E. C. 2264: On the nature of the spectrum in problems of relativistic quantum mechanics.

Titgemeyer, Rainer. 3844: Über einen Widerspruch in Cogans Darstellung der Mengenlehre.

Tits, Jacques. 2149: Théorème de Bruhat et sous-groupes paraboliques.

3117: "Sur une classe de groupes de Lie résolubles", corrections et additions.

3990: Ovoldes et groupes de Suzuki.

4039: Groupes algébriques semi-simples et géométries associées.

Titus, C. J. 559: (with Young, G. S.) The extension of interiority, with some applications.

Tkalië, V. S. 894: (with Saltanov, N. V.) Waves of finite amplitude in nonideal magnetohydrodynamics. 5675: Two-parameter motions in magneto-gasdynamics (Gromeka and Chaplygin transformations).

Tobecman, W. 5751: (with Peshkin, Murray) Flux quantization and time-reversal degeneracy.

Todd, John. 1630: Motivation for working in numerical analysis.

1631: Classical numerical analysis.

1659: (with Newman, Morris)
Automatic computers.

Todorinov, Simeen. 5176: Sur la distribution des zéros d'une classe des fonctions entières.

Tegliatti, Eugenie G. 2498: Un'osservazione sulle direzioni inflessionali d'una traeformazione cremoniana tra due piani.

Tôgô, Shigeaki. 3093: On splittable linear groups. II.

Tekuoka, T. 2746: Three-dimensional Maxwell stress-strain relations in viscoelasticity.

Telmačev, V. V. 2857: Logarithmic criterion for superconductivity.

4874: The problem of two-particle bound state for a non-ideal
Fermi-Dirac system.

5748: (with Bogoliubov, N. N. and Širkov,
D. V.) \*\*A new method in the theory of superconductivity.

Tolmachev, V. V. = Tolmačev, V. V.

Telstov, G. P. 154: The derivative and the integral from a general viewpoint. 3144: Parametric differentiation and the narrow Denjoy integral. 3145: On an abstract integral considered by S. Banach.

Tember, M. L. 104: (with Laufer, P. J.) Some Lie admissible algebras. Teminaga, Hisaa. 2099: (with Takazawa, Takao) On a simple ring with a Galois group of order  $p^s$ .

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Temiyama, Jun. 2465: (with Takesaki, Masamichi) Applications of fibre bundles to the certain class of C\*-algebras. 5403: (with Saitô, Teishirô) Some results on the direct product of W\*-algebras. Temonaga, Yasurê. 2009: Differentiable imbedding and cobordism of

orientable manifolds.

Tondeur, Ph. 1515: Affine Zusammenhange auf Mannigfaltigkeiten mit fast-symplektischer Struktur.

Tonin, M. 4815: (with Bertocchi, L.; Fubini, S. and Stroffolini, R.) Some remarks on the relativistic two-body equation. 4851: (with Amati, D.; Fubini, S. and Stanghellini, A.) A theoretical approach to high-energy pion phenomena.

Tonnelat, Marie-Antoinette. 1925: Théorie euclidienne du champ de gravitation. Énergie gravitationnelle.

Töpfer, Hans-Jeachim. 3636: Über Eindeutigkeit und praktische Berechnung der Lösungen von Randwertaufgaben in der Theorie der orthogonal-anisotropen Platten.

Topoljans'kii, D. B. 4116: On submetaharmonic functions. 4117:

A note of logarithmic-submetaharmonic and logarithmic-sub-biharmonic functions.

Toponogov, V. A. 3476: Dependence between curvature and topological structure of Riemann spaces of even dimension.

Toraldo di Francia, Giuliano. 3686: (with Ronchi, Laura; Russo, Vera and Zaccagnini, Corrado) Scattering of evanescent waves by cylindrical structures.

Toscano, Letterio. 4152: Sui polinomi classici ortogonali e le relative funzioni di seconda specie.

Tóth, L. Fejes = Fejes Tóth, L.

Toteki, Harue. 1574: A method of construction of measures on function spaces and its applications to stochastic processes.

Trahtenbrot, B. A. 1996: Certain constructions in the logic of one-place predicates.

Trampus, Anthony. 5382: Differentiability and analyticity of functions in linear algebras.

Tranter, C. J. 5206: On the analogy between a series containing Jacobi polynomials and the Weber-Schafheitlin integral.

Traugott, S. C. 3656: Impulsive motion of an infinite plate in a compressible fluid with non-uniform external flow.

Treder, H. 5775: (with Dautcourt, G. and Papapetrou, A.) Eindimensionale Gravitationsfelder.

Treder, Hans-Jürgen. 1920: \*\*Gravitative Stosswellen. Nicht-analytische Wellenlösungen der Einsteinschen Gravitationsgleichungen. 3777: (with Papapetrou, Achilles) Das Sprungproblem nullter Ordnung in der allgemeinen Relativitätstheorie.

Trench, William F. 2935: A general class of discrete time-invariant filters.

Trendelenburg, Ferdinand. 4732: ★Einführung in die Akustik.

Tret'jakov, V. P. 4274: On the theory of formal multiplication of double series.

Trèves, François. 3387: Differential equations in Hilbert spaces.

Trevisan, Giorgie. 5211: Un'espressione esplicita per l'integrale di un sistema di equazioni differenziali lineari ordinarie a coefficienti costanti. Applicazioni.

Tricomi, Francesco Giacomo. 2254a: ★Equazioni differenziali. 2254b: ★Differential equations.

Trifonov, E. D. 2818: (with Novotilov, Ju. V.) An axiomatic method in quantum field theory and symmetry properties of elementary particles.

Trigub, R. M. 273: Approximation of functions by polynomials with integer coefficients.

Trilling, Leon. 4747: On plane linear magnetohydrodynamic waves. Trnkova, V. = Sediyá-Trnková, Vera.

Troisi, Marie. 5280: Su un problema di trasmissione.

Trollope, R. 4010: (with Israel, W.) New possibilities for a unified field theory.

Trolin, G. D. 4103: On the interpolation problem in the class of entire functions of finite order and finite type.

Trott, Stanton M. 5113: A pair of generators for the unimodular group.

- Truesdell, C. 1706: General and exact theory of waves in finite elastic strain.
- Trümper, Manfred. 1004: Zur Bewegung von Probekörpern in Einsteinschen Gravitations-Vakuumfeldern.
- Trulin, G. I. 3444: Third-order conjugate systems from pamiasymptotic lines.
- Tsang, T. 4866: Electron correlation in atoms and molecules.

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- Tschauner, Johann. 1309: Erzeugende Funktionen von zugeordneten Kugelfunktionen. 2345: Über eine Verallgemeinerung der Exponentialreihe.
- Tsu, Raphael. 242: The evaluation of incomplete normalization integrals and derivatives with respect to the order of associated Legendre polynomials.
- Tsuda, Mitsuru. 3508: On adjunction spaces. 3509: A remark on mapping spaces.
- Tsukamoto, Takashi. 127: On the local theory of quaternionic antihermitian forms.
- Tsukameto, Yêtarê. 2561: On Riemannian manifolds with positive curvature. 2562: On a theorem of A. D. Alexandrov.
- Tsukibayashi, Shomei. 667: Estimation of bivariate parameters based on range.
- Tsuzuku, Tosiro. 3959a: (with Nakayama, Tadasi) On Frobenius extensions. II. 3959b: (with Nakayama, Tadasi) Correction to our paper "On Frobenius extensions. II".
- Tu, Yih-O. 828: (with Handelman, George) Lateral vibrations of a beam under initial linear axial stress.
- Tubis, Arnold. 1865: (with Frank, William M.) Integral equation for static nuclear potential.
- Tucker, Heward G. 3558: Best one-sided bounds for infinitely divisible random variables.
- Tully, E. J., Jr. 135: Representation of a semigroup by transformations acting transitively on a set.
- Tulub, A. V. 959: (with Novozhilov, Yu. V.) \*The method of
- functionals in the quantum theory of fields.

  Tumarkin, G. C. 5185: A sufficient condition for a domain to belong to
- Tumarkin, L. A. 554: On the decomposition of spaces into a countable number of zero-dimensional sets.
- number of zero-dimensional sets.

  Tung, F. 4939: (with Schwarz, R. J.) Optimum nonlinear filters for
- quantized inputs.

  Tupčiev, V. A. 287: On the existence, uniqueness and asymptotic behaviour of the solution of a boundary-value problem for a system of differential equations with a small parameter multiplying the
- Turán, P. 370: A remark on Hermite-Fejér interpolation 1138:
  On Lindelöf's conjecture concerning the Riemann zeta-function.
  1169: On the eigenvalues of matrices. 1267: (with Szegő, G.) On the monotone convergence of certain Riemann sums. 3056: On some questions concerning determinants. 5039: On some one-sided theorems of the theory of Diophantine approximation.
- Turnbull, David. 1908: (with Seitz, Frederick, co-editor) \*Solid State Physics: Advances in research and applications. Vol. 13.
- Turner, Louis A. 2787: Simplification of Carathéodory's treatment of thermodynamics. II.
- Turowics, A. B. 3605: (with Górecki, H.) Sur la résolution des équations algébriques par la méthode de Euler.
- Turpin, Maurice. 2539: Limitation des caractères d'un système extérieur.
- Turquette, Atwell R. 3813: A general theory of k-place stroke functions in 2-valued logic.
- Turrittin, H. L. 349: The formal theory of systems of irregular homogeneous linear difference and differential equations.
- Tutaev, L. K. 3443: (with Platonova, V. I.) On the theory of ruled surfaces in an affine 3-space.
- Tutte, W. T. 1198: A census of Hamiltonian polygons. 3517: A theory of 3-connected graphs. 3858: On the problem of decomposing a graph into a connected factors. 3859: On the colourings of graphs. 3866: A new branch of enumerative graph theory. 4517: A non-Hamiltonian planar graph.
- Tutubalin, V. N. 5542: (with Freidlin, M. I.) On the structure of the infinitesimal σ-algebra of a Gaussian process.

- Tuulmets, L. A. 5465: (with Lumiste, Ju. G.) Minimal congruences  $V_3$  in the Euclidean space  $R_4$ .
- Twersky, Victor. 5682: Multiple scattering by arbitrary configurations in three dimensions.
- Tynjanskii, N. T. 2600: †Spectral duality law for manifolds not satisfying acyclicity conditions.
- acyclicity conditions.

  Tyrrell, J. A. 2963: Reversion of a formal power series.

  4409:
- (with Reeve, J. E.) Intersection theory on a singular algebraic surface.
  Tylkevič, R. I. 124: (with Suprunenko, D. A.) Reducible locally nilpotent, linear groups.
- Trou, K. H. 1889: Parité de doublet et sa conservation dans les interactions électromagnétique et faible. 2792: Sur les formulations de l'invariance de jauge. 2841: Les champs de doublet de masse. 3708: Sur les invariances de jauge des doublets de particules.
- Tru, H. Y. 1850: The integral equation for the low energy π-N scattering.
- Uberoi, Mahinder S. 5681: Magnetohydrodynamics at small magnetic Reynolds numbers.
- Uchiyama, Saburô. 1145: On the uniform distribution of sequences of integers.
- Udagawa, Kanehisa. 640: (with Ito, Noriko) Note on a relation between the Markov chain and the birth and death process.
- Udgaonkar, Bhalchandra M. 1863: (with Gell-Mann, Murray) Highenergy nuclear scattering and Regge poles.
- Ueno, S. 5767: On the diffusion matrix of radiative transfer.
- Uene, Yoshio. 2899: (with Nariai, Hidekazu) On the invariant spatial distance in a curved space-time with spherical symmetry. II. The problem of the allowable mean value for the distances among several abservers.
- Uesugi, Toshitane. 1240: A note on the prolongation of the pseudogroup of transformations.
- Ufljand, Ja. S. 893: (with Čekmarev, I. B.) On some possibilities of accelerating electrically conducting fluids with the use of crossed magnetic fields. 1762: Certain questions in the unsteady flow of a conducting fluid through a tube of constant cross section in a transverse magnetic field. 1769: Rotation of a conducting fluid in an annular clearance under the influence of a transverse magnetic field.
- Uhimann, Armin. 4818: Über die Definition der Quantenfelder nach Wightman und Haag.
- Uhlmann, Werner. 4648: Über harmonische und isotrope stochastische Prozesse mit Fehlerschätzung für ein Differenzenverfahren.
- Ulam, S. 1721: Stability of many-body computations.
- Ulitke, A. F. 1680: Solution of certain problems of the space theory of elasticity by the method of vector eigenfunctions.
- Ul'janov, P. L. 385: (with Steckin, S. B.) On sets of uniqueness. 1984: (with Men'sov, D. E.) Professor N. K. Bari: In Memoriam.
- Ullian, Joseph S. 3823: A theorem on maximal sets.
- Ullman, Robert. 926: (with Caulfield, Daniel) High-angle limit in lowangle scattering and its effect on the determination of surface area.
- Umegaki, Hisaharu. 5401: Conditional expectation in an operator algebra. IV. Entropy and information.
- Umezawa, H. 5715: (with Ezawa, H. and Kikkawa, K.) Potential representation in quantum field theory.
- Underhill, J. 4840: Non-relativistic dispersion relations for a twochannel scattering process.
- Ungar, Eric E. 5640: (with Kerwin, Edward M., Jr.) Loss factors of viscoelastic systems in terms of energy concepts.
- Ungar, Peter. 1362: Instability of wave trains.
- Unger, Stephen H. 2973: A theorem on self-overlapping sequences.
- Urabe, Minoru. 275: Non-linear problems (Self-generated oscillations). 759: Theory of errors in numerical integration of ordinary differential equations. 5231: The potential force yielding a periodic motion whose period is an arbitrary continuous function of the amplitude of the velocity.
- Ural'ceva, N. N. 4231: General second-orde: quasi-linear equations and certain classes of systems of equations of elliptic type. 5271: (with Ladyženskaja, O. A.) Differential properties of bounded generalized solutions of multidimensional quasilinear elliptic equations and variational problems. 5288: (with Ladyženskaja, O. A.) A

- boundary-value problem for linear and quasi-linear parabolic equations.
- Urbanik, K. 5000: Reversibility in absolute-valued algebras.
- Usačev, Ju. D. 1868: "Scalar" form of the Dirac equation and calculation of the matrix elements for reactions with polarized Dirac particles.
- Ušakov, V. I. 143: On a class of topological groups. 1215: Lattice isomorphisms of non-periodic locally nilpotent groups.
- Uspalis, K. K. 3746: (with Vanagas, V. V. and Glembockil, I. L.) Evaluation of the radial integrals arising in the theory of atomic spectra.
- Uspenskil, S. V. 449: Imbedding theorems for classes with weights.
  441: Boundary properties of functions in the "weight" classes
  Wing, 1. 2434: Imbedding theorems for the generalized classes W, of Sobolev.
- Uspenskii, V. A. 3822: On the relation between various systems of constructive real numbers.
- Ustineva, T. I. 4696: (with Kondrat'ev, A. S.) Solution of a problem concerning oscillatory properties of the vibrations of longitudinally compressed rods.
- Utiyama, Ryoyu. 2890: Renormalization of quantum electrodynamics in a classical gravitational field.
- Uttley, Robert G. 395: Almost periodicity and convergent trigonometric series.
- Utz, W. R. 2275: Properties of solutions of  $u'' + g(t)u^{2n-1} = 0$ .
- Uzakov, Ju. K. 3339: Construction of integro-differential equations with ordinary derivatives and admitting a given Lie group.
- Uzawa, Hirofumi. 4925: The stability of dynamic processes.
- Vaida, Dragos. 29: Caractérisation des treillis distributifs.
- Vaidya, P. C. 1930: (with Pandya, I. M.) Wave solutions in general relativity. I.
- Vaillant, Jean. 1999: Sur les discontinuités du tenseur de courbure en théorie d'Einstein-Schrödinger.
- Vainberg, B. R. 2316: Asymptotic representation of the fundamental solutions of hypo-elliptic equations and the problem in the entire space with conditions at infinity.
- Vainberg, M. M. 751: On the convergence of the method of steepest descent for non-linear equations.
- Vainštein, I. 3617: (with Kreines, M.) Letter to the editor.
- Validatein, L. A. 5691: (with Federov, A. A.) Scattering of plane and cylindrical waves on an elliptical cylinder and conception of diffraction of rays. 5812: (with Zubakov, V. D.) ★Extraction of signals from noise.
- Väisälä, Jussi. 4099: (with Gehring, F. W.) On the geometric definition for quasiconformal mappings. 4100a: On quasiconformal mappings in space. 4100b: On quasiconformal mappings of a ball.
- Valsbord, E. M. 2298: On the existence of a periodic solution of a third-order non-linear differential equation. 4187: On the existence of a periodic solution and on the global boundedness of solutions of a system of ordinary third-order differential equations.
- Valsman, Izu. 496: Sur quelques aspects de dualité dans la théorie tensorielle des réseaux dans les espaces V<sub>2</sub> et W<sub>2</sub>.
- Vajda, S. 775: (with Kershaw, D.) The economics of dumping from electronic computers.
- Vaks, V. G. 1830: Asymptotic form of the vertex part in electrodynamics.
- Valentini, Germana. 4356: Sulla quantizzazione dei sistemi soggetti a forze d'attrito.
- forze d'attrito.

  Valette, Guy. 5460: Le contact des objets formés d'une courbe et d'une surface incidentes.
- Val'fii, A. Z. 5038a: Über Gitterpunkte in mehrdimensionalen Kugeln. II. 5038b: Über Gitterpunkte in mehrdimensionalen Kugeln.
- Val'fil, Anna. 3017: On the theory of a class of Dirichlet series.
- Vallander, S. V. 1895: (with Belova, A. V.) Integral kinetic equations for a gas mixture with internal degrees of freedom. 2879: (with Belova, A. V.) Integral kinetic equations of mono-atomic gas theory in the presence of an external mass-force field.
- Van, Kon-tin. 4230: (with Din, Sja-si; Čžan, Tun and Ma, Žu-njan')

Definition of ellipticity of a system of second order differential

V

V

V

Ve

Vi

- equations with constant coefficients.

  Vanagas, V. V. 3746: (with Uspalis, K. K. and Glembockii, I. I.)

  Evaluation of the radial integrals arising in the theory of atomic spectra.
- Van Buskirk, James. 4539: (with Fadell, Edward) The braid groups of E<sup>2</sup> and S<sup>2</sup>.
- Vandakurov, Ju. V. 3670: Effect of finite conductivity on equilibrium in a weakly twisted pinch. I.
- Vanden Eynden, C. L. 3884: A congruence property of the divisors of n for every n.
- Vangeldère, J. 512: Sur les  $V_3$  de  $S_5$  qui possèdent deux systèmes distincts d'asymptotiques doubles.
- Van Hove, L. 3749: (with McVoy, K. W.) Pair distribution functions and scattering phenomena.
- Van Ness, J. 722: (with Freiberger, W. and Rosenblatt, M.) Regression analysis of vector-valued random processes.
- Vanstone, J. R. 2472: Autoparallel deviation in the geometry of Lyra.
   Vaona, Guide. 486: Sui sistemi di ∞<sup>k</sup>S<sub>k</sub> che appartengono al massimo numero di complessi lineari indipendenti.
   514: Sul teorema fondamentale della nomografia.
- Varberg, Dale E. 5543: Gaussian measures and a theorem of T. S. Pitcher.
- Vardanjan, V. A. 4718: (with Oganesjan, R. S.) Contribution to the theory of stability of a plane layer of gravitating fluid with density decaying exponentially within a magnetic field.
- Varga, Richard S. 3613: On higher order stable implicit methods for solving parabolic partial differential equations.
- Varma, A. K. 3306: (with Sharma, A.) Some interpolatory properties of Tehebicheff polynomials (0, 2) case modified.
- Varma, V. K. 401: On a new transform. 2396: On a theorem in operational calculus. 5348: Laplace transform and self-reciprocal functions.
- Varšavskii, V. I. 1973: On the complexity of networks with depth two formulated from threshold elements.
- Vasilach, Serge. 5686: Sur un système d'équations intégre-différentielles du champ électromagnétique dans des milieux excités et au repos.
- Vasilache, Sergiu. 3367: Calcul opérationnel algébrique des distributions à support dans  $R_-=]-\infty$ , 0].
- Vazil'čenko, G. V. 1693: (with Šimko, K. I.) An analogy between the solution of certain problems in the theory of elasticity and in hydrodynamics.
- Vasil'ev, A. M. 2548: A class of affine connections in homogeneous spaces. 2549: Invariant affine connections in homogeneous spaces.
- Vasil'eva, A. B. 3251: An equation of neutral type with small lag. 4180: Asymptotic methods in the theory of ordinary differential equations with small parameters multiplying the highest derivatives.
- Vassalls, Gérard. 5689: Propagation, polarisation en optique statistique.
  Vasudevan, R. 2627: (with Ramakrishnan, Alladi) A physical approach to some limiting stochastic operations. 3220: (with Bellman, Richard and Kalaba, Robert) A note on perturbation series for the periods of solutions of nonlinear differential equations.
- Vaswani, P. K. T. 774: (with Cherry, Colin) A new type of computer for problems in propositional logic, with greatly reduced scanning procedures.
- Vatagin, A. B. 1759: On the flow in a diffusor in the presence of a magnetic field.
- Vaught, R. 2951: (with Lévy, A.) Principles of partial reflection in the set theories of Zermelo and Ackermann.
- Vavra, M. H. 1724: \*Aero-thermodynamics and flow in turbomachines.
- Vedernikev, V. I. 517: Surfaces enveloping a family of hyperspheres.
  Vedeeva, M. G. 5187: On a boundary-value problem for linear relation with prescribed shifts.
- Vegrin, L. D. 2428: †Direct spectra of topological spaces.
- Veidinger, L. 3316: On the numerical determination of the best approximations in the Chebyshev sense.
- Veksler, A. I. 27: Topological and lattice-completeness of normed and linear topological lattices. 5394: On realizability conditions for Archimedes' condition in semi-ordered factor groups and factor

Vekua, I. N. 2217: Stationary singularities of generalized analytic | functions. 5636: A projective property of force and deflection

Veldkamp, G. R. 3950: Remark on Euclidean rings.

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Vellando, Gonzalo Arnaiz. See Arnaiz Vellando, Gonzalo.

van de Ven, A. 3548: Analytic compactifications of complex homology cells.

Vencel', N. O. 807: (with Agar'ov, V. A. and Cornii, M. M.) On the general solution of the problem of the bending of a plate in polar

Venini, Carlo. 4663: Principio variazionale riguardante il moto periodico di sistemi olonomi.

Venkataraman, R. 1115: Symmetric ordered sets. 1224: (with Sankaran, N.) A generalization of the ordered group of integers.

Venkatesha Murthy, M. K. 4246: A remark on the regularity at the

boundary for solutions of elliptic equations.

Venkateswara Rao, N. 45: Further generalisation of a result of Mordell's.

Venkov, B. B. 5094: Cohomology of groups of units in algebras with division.

Venteel', A. D. 2637: Additive functionals on a multi-dimensional Wiener process

Ventcel', E. S. 587: ★The theory of probability.

Verblunsky, S. 3291: A uniqueness theorem for the exponential series

Verboven, E. 5764: On the theory of electron transport. the theory of electron transport.

Vere-Jones, D. 4571: Geometric ergodicity in denumerable Markov

Verhaar, B. J. 5739: Description of collective nuclear vibrations using shell model wave functions

Verhagen, A. M. W. 1598: The estimation of regression and error-scale parameters, when the joint distribution of the errors is of any continuous form and known apart from a scale parameter.

Verma, P. D. 3647: Singularities and their application to flow problems. Veršik, A. M. 2645: On the theory of normal dynamical systems.

Vertgelm, B. A. 196: Approximate construction of quasiconformal mappings of the circle onto certain domains. 4096: Approximate construction of certain quasi-conformal maps.

Vesentini, Edoardo. 4132: Non-régularité, en dimension 2, de la forme résidu, aux points doubles quadratiques. 4551: (with Andreotti, A.) Sopra un teorema di Kodaira,

Viehmann, F. 2351: Generalized convergence factors for the Euler-Knopp method.

Vidav, Ivan. 3386: Sur un système d'axiomes caractérisant les algèbres

Videnskii, V. S. 3136: Remarks on a theorem of V. A. Markov on two polynomials whose zeros interlace. 5147: Some estimates for derivatives of rational fractions.

Vigier, Jean-Pierre. 2831: (with Hillion, Pierre) Une seconde extension du formalisme de Utiyama. 2832: (with Hillion, Pierre) Les ondes ssociées à une structure interne des particules. 2833: (with Hillion, Pierre) Sur les équations d'ondes associées à la structure des bosons. 2834: (with Hillion, Pierre) Sur les équations d'ondes associées à la structure des fermions.

Vigranenko, T. I. 5359: On an integral equation and the method of A. I. Nekrasov.

Vihman, F. = Vichmann, F.

Vilhelm, Václav. 26: A remark on complete lattices represented by sets. Viljacer, V. G. 134: Some examples of automorphism groups.

Villaggio, Piero. 2325: Sui problemi al contorno per sistemi di equazioni differenziali lineari del tipo di stabilità dell'equilibrio elastico. 5626: Sui problemi di trasmissione dell'elasticità piana. Villani, Vinicio. 1297: Su una classe di domini di olomorfia approssi-

mabili dall'esterno.

Vinberg, E. B. 5077: Homogeneous cones.

Vincensini, Paul. 409: Congruences cycliques et asymptotiques 1510: Sur l'application d'une représentavirtuelles d'une surface. tion hyperspatiale à l'étude des familles de cercles ou de sphères.

Vincent, Shirley E. 4601: A test of homogeneity for ordered variances.

Vol'vačev, R. T. 4003: Locally nilpotent subgroups of classical groups.

Vincenti, Walter, G. 889: (with Baldwin, Barrett S., Jr.) Effect of

thermal radiation on the propagation of plane acoustic waves.

Vincse, E. 350: Über die Verallgemeinerung der trigonometrischen und verwandten Funktionalgleichungen.

Vineze, István. 692: On the deviation of two-variate empirical distribution functions. 5579: On two-sample tests based on order

Vinograd, R. E. 731: (with Geronimus, Ju. V.) The extrapolationgradient method of searching for the minimum of a quadratic function.

Vinogradov, A. I. 3921: A generalization of a formula of Kloosterman. 3930: On the class number.

Vinegradov, A. M. 1558: On the second obstruction to cross sections. Vinogradov, I. M. 1143: On the distribution of the fractional parts of the values of a polynomial.

Vinogradova, I. A. 5153: On the representation of a measurable function by an indefinite A-integral. 5154: On an indeterminate A-integral.

Vinti, Calogero. 4386: L'integrale multiplo del calcolo delle variazioni in forma ordinaria come generalizzazione dell'approssimazione dell'area di una superficie.

Vinti, John P. 1940: Theory of an accurate intermediary orbit for satellite astronomy. 1941: Formulae for an accurate intermediary orbit of an artificial satellite.

Virág, I. 2084: (with Maurer, I. Gy.) Gewisse Untersuchungen über den Quotientenring eines kommutativen Ringes.

Višik, M. I. 322: (with Ljusternik, L. A.) Regular degeneration and boundary layer for linear differential equations with small parameter. Vitásek, Emil. 765: Numerische Behandlung von der quasistationären

Lösung der Wärmeleitungsgleichung.

Vitaver, L. M. 5008: On a vertex-edge graph function.

Vitner, Cestmir. 5458: Differential geometry of curves in centro-Euclidean spaces. 5459: The differential geometry of hypersurfaces in the centro-Euclidean space E.c.

de Vito, Luciano. 2167: Su una ricostruzione della teoria dell'integrazione secondo Lebesgue. 2323: Sulla equazione integrodifferenziale di tipo ellittico di Volterra. 4118: Sulle funzioni ad integrale di Dirichlet finito.

Vladimirov, V. S. 2806: (with Logunov, A. A.) On analytic properties of generalized functions of quantum field theory.

Vodička, Václav. 1667: Free vibrations of a composite circular 2789: Three-dimensional steady temperature in a membrane. stratiform doubly infinite strip.

Vogel, Heinrich. 4977: \*Zum philosophischen Wirken Max Plancks. Seine Kritik am Positivismus.

Vogel, Walter O. 4429: Flächen, die von einer einparametrigen Schar kongruenter Kreise erzeugt werden.

Voi, Antonio Lo. See Lo Voi, Antonio.

Vollokov, M. I. 5226: Massera's method of proving uniqueness of a limit cycle.

Vollokov, V. I. 3231: Approximate integration of non-linear differential equations of oscillatory motion with one degree of freedom.

Vol'fersdorf, L. 335: On the singular elliptic Neumann problem for the Tricomi equation.

Volk, I. M. 1334: A limiting case in the theory of periodic solutions of Lyapunov systems.

Volkmann, Bodo. 2035: (with Kasch, Friedrich) Metrische Sätze über transzendente Zahlen in P-adischen Körpern. II. 5036: Zur metrischen Theorie der S-Zahlen.

Volkonskii, V. A. 597: (with Rozanov, Ju. A.) Some limit theorems for random functions. II. 610: Additive functionals of Markov

Volkey, I. I. 363: Summability factors for Cesàro methods of complex

Volkev, I. S. 4562: Analysis of some limit theorems for large deviations. Volosov, V. M. 3217: Averaging in certain systems of differential equations.

Volpate, Marie. 3135: Sulle funzioni definite implicitamente dall'equazione f(x, y) = 0.

Volta, Vittorio Dalla = Dalla Volta, Vittorio.

Vepenka, Peir. 13: A method of constructing a non-standard model in the Bernays-Gödel axiomatic set theory.

Verel, Z. 1357: (with Kurzweil, J.) On linear control systems. 4211: Estimates of the distance of two solutions based on the theory of generalized differential equations.

Vereb'ev, A. P. 266: Cycles about a singular point of the node type. 2273: On periodic solutions in the case of a center.

Vorob'ev, N. N. 1959: Dismembered strategies.

Verenovskaja, E. V. 3149: (with Zinger, M. Ja.) An estimate for polynomials in the complex plane.

Vostrecov, B. A. 2353: (with Kreines, M. A.) Approximation of a plane wave by superpositions of plane waves with given directions.

Vranceanu, Georges. 3565: (with Vranceanu, Georges-Georges) Probabilités et transport parallèle.

Vranceanu, Georges-Georges. 3565: (with Vranceanu, Georges) Probabilités et transport parallèle.

Vul, E. B. 4353: On the uniqueness of the representation of some classes of positive definite generalized functions.

Vygodskii, M. Ja. 1991: L'origine de la règle de deux fausses positions.

Waelbroeck, L. 1444: Une partition de l'unité dans  $\theta(x, \delta)$ . 3353: Les espaces à bornés complets. 3381: Études spectrale de certaines algèbres complètes. 4333: Le complété et le dual d'un espace "à bornés".

Wagner, A. 2504: Perspectivities and the little projective group. 5120: On the associative law of groups.

Wagner, Daniel H. 1954: A decision problem with a deadline.

Wagner, K. 4659: Über ein Axiomensystem des Peano-Jordanschen und Borel-Lobesgueschen Massbegriffes in Mengenringen.

Wagner, Richard. 2482: Bewegungsgruppen auf n-dimensionalen Quadriken.

Wahlquist, Hugo D. 4888: (with Burt, P.) Spin and exchange corrections to plasma dispersion relations.

Wainstein, L. A. = Vainštein, L. A.

Wais, James R. 2917: A note on the electromagnetic response of a stratified earth.

Wakakuwa, Hidekiyo. 528: On affinely connected manifolds admitting groups of affine motions with complex reducible linear isotropy groups. 1524: On linearly independent almost complex structures in a differentiable manifold.

Wakano, Masami. 1817: Foundations for a treatment of the scattering of light by the hydrodynamical and statistical atom model.

Wakita, Hitoshi. 3694: On an extension of the mathematical framework of the quantum theory. 4799: On an extension of the mathematical framework of the quantum theory. II. Mathematical meaning of the renormalization theory.

Walfisz, A. = Val'fil, Anna.

Walfier, A. = Val'fil, A. Z.

Waligórski, Stanislaw. 1100: Calculation of the Quine's table for truth functions.

Waliszewski, Włodzimierz. 5145: (with Charzyński, Zygmunt) Sur l'existence de solutions pour des systèmes d'équations algébriques réelles non linéaires.

Walker, A. G. 5456: (with Ruse, H. S. and Willmore, T. J.) ★Harmonic monors.

Walker, A. M. 728: Large-sample estimation of parameters for moving-average models.

Walker, Elbert A. 119a: (with Irwin, John M.) On N-high subgroups of Abelian groups.

Wall, C. T. C. 2009: On the orthogonal groups of unimodular quadratic forms. 2621: Killing the middle homotopy groups of odd dimensional manifolds.

Wall, Gordon E. 114: (with Kegel, Otto H.) Zur Struktur endlicher Gruppen mit nicht-trivialer Partition.

Wallace, A. D. 558: Relative ideals in semigroups. I (Faucett's Theorem).

Wallace, Andrew H. 5520: A geometric method in differential topology.
Wallace, D. A. R. 3986: Group algebras with radicals of square zero.
4007: Group algebras with central radicals.

Wallace, E. W. 3969: Some nilpotent algebras with centres of given

dimension. 3979: Properties of I-extensions of anti-commutative algebras.

Wallington, P. A. 2664: (with Shenton, L. R.) The bias of moment estimators with an application to the negative binomial distribution.

Wallis, R. F. 2879: (with Maradudin, A. A.) Lattice anharmonicity and optical absorption in polar crystals. III. Quantum mechanical treatment in the linear approximation.

4889: (with Jepsen, D. W.)
Effect of quartic anharmonicity on the infrared absorption of alkali halide crystals.

Wallström, Bengt. 1962: Alternative routing in a two-stage link system. Congestion theory and simulated traffic studies.

Walnut, Thomas H. 2877: Vibrational wave functions for anharmonic crystals. V

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Walsh, B. J. 5388: (with Schaefer, H. H.) Spectral operators in spaces of distributions.

Walsh, J. L. 174: (with Shisha, O.) The zeros of infrapolynomials with some prescribed coefficients. 738: (with Ahlberg, J. H. and Nilson, E. N.) Best approximation properties of the spline fit.
4109: (with Evans, J. P.) Approximation by bounded analytic functions to functions represented by Dirichlet series.

Walt, M. 3672: (with MacDonald, W. M.) Distribution function of magnetically confined electrons in a scattering atmosphere.

Walters, K. 1752: A note on the rectilinear flow of elastico-viscous liquids through straight pipes of circular cross-section.

Wan, Zhe-xian. 5115: A proof of the automorphisms of linear groups over a sfield of characteristic 2.

Wang, Chuan-fang. 194: On the precision of Mori's theorem in Q-mapping.

Wang, Ju-kwei. 1462: Multipliers of commutative Banach algebras. 5320: Bemerkungen über das Hausdorffschen Momentproblem für Funktionen in L.

Wannier, G. H. 1859: (with Fredkin, D. R.) Decoupling of Bloch bands in the presence of homogeneous fields.

Ward, Fred. 4016: (with Shapiro, Ralph) Decomposition and comparison of time series of indices of solar activity.

Ward, G. N. 1938: On the secular variations of the elements of satellite orbits.

Ward, Harold N. 5104: On Ree's series of simple groups.

Ward, Morgan. 2028: The linear p-adic recurrence of order two. 2029: The prime divisors of Fibonacci numbers.

Warga, J. 5415a: Relaxed variational problems. 5415b: Necessar, conditions for minimum in relaxed variational problems.

Waring, R. K., Jr. 1992: Classical microecopic model for magnetic resonance including relaxation effects.

Warner, Seth. 102: Compact rings.

Wasserman, Robert H. 4725: A class of three-dimensional compressible fluid flows.

Watabe, Mitsue. 5757: Transport coefficients of quantum plasma.

Watanabe, Jiro. 4371: On some properties of fractional powers of linear operators.

Watanabe, Shinzo. 5548: (with Reda, Nobuyuki) On some relations between the harmonic measure and the Lévy measure for a certain class of Markov processes.

Watanabe, Shēji. 541: On special Kawaguchi spaces. III. Generalizations of affine spaces and Finsler spaces. 1499: On special Kawaguchi spaces. IV. Extremal curves in the generalized affine spaces. 1500: On special Kawaguchi spaces. V. Some remarks on the special Kawaguchi spaces. 1936: The spinor space in the unified field theory of the third class.

Watanabe, Takesi. 5530: On a theorem of F. L. Spitzer and C. J. Stone.
Watanabe, Yoshikatsu. 1595: The Student's distribution for a universe bounded at one or both sides.

Watari, Wataro. 5737: (with Otsuki, Shoichiro and Tamagaki, Ryozo) Two-nucleon potential with full recoil. III. Detailed discussions on its characteristic features.

Watson, G. L. 1131: Indefinite quadratic polynomials. 1135: On the gaps between the values of a rational quadratic polynomial. 3013: Indefinite quadratic forms in many variables: the inhomogeneous minimum and a generalization.

Watson, G. S. 1626: Goodness-of-fit tests on a circle. II. '4688: (with Box, G. E. P.) Robustness to non-normality of regression tests.

- Watterson, G. A. 4575: Some theoretical aspects of diffusion theory in population genetics.
- Watts, Charles E. 565: On the Euler characteristic of polyhedra.

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- Waugh, Nancy C. 638: (with Smith, J. E. Keith) A stochastic model for free recall.
- Ważewski, T. 3128: (with Plié, A.) Functions with all partial derivatives arbitrarily prescribed at a point.
- Weber, Hans Rud. 2469: Kanonische Theorie der Mayerschen Variationsproblem in Parameterform.
- Weber, Oskar. 2037: Über die Reduktion und die Darstellungen positiver quaternarer quadratischer Formen.
- Weber, Richard R. 1338: (with Ludeke, Carl A.) An optimization of the phase-plane-delta method for the solution of non-linear differential equations.
- Weber, T. 1847: (with Budini, P.) Gauge invariance of form factors.
- Weertman, J. 838: Fast moving edge dislocations on the (110) plane in anisotropic body-centred-cubic crystals.
- Weidenhammer, Fritz. 4666: (with Schmidt, Günter) Instabilitäten gedämpfter rheolinearer Schwingungen.
- Weier, Joseph. 570: Ueber die Lösung sphärischer Gleichungen. 2616: Über die gegenseitige Lage von Feldern über Mannigfaltig-4452: Zur Riemannschen Tensoranalysis. 5512: Com posantes invariantes des représentations de variétés en variétés. 5519: Zu einer Franzschen Spurformel.
- Weik, Martin H. 1657: \*A third survey of domestic electronic digital
- Weil, André. 147: Algebras with involutions and the classical groups. 1241: On discrete subgroups of Lie groups. 1242: On discrete subgroups of Lie groups. II.
- Weinberg, Elliot Carl. 2013: Higher degrees of distributivity in lattices of continuous functions.
- Weinberg, I. J. 4693: Symmetric finite deflections of circular plates
- subjected to compressive edge forces.

  Weinberg, Louis. 5697: (with Slepian, Paul) Takahasi's results on Tchebycheff and Butterworth ladder networks.
- Weinberger, H. F. 3616: Optimal approximation for functions prescribed at equally spaced points.
- Weinstock, Jerome. 1888: Binary collision expansion of the classical N-body Green's function.
- Weiss, George. 2919: On certain redundant systems which operate at 3789: (with Maradudin, Alexei A.) Some problems discrete times. 4881: (with Abraham, Phillip B.) On the calculain traffic delay. tion of analytic functions of cyclic matrices.
- Weiss, Guido. 3329: \*Harmonic analysis in several variables. Theory of HP spaces.
- Weiss, Harry J. 3632: (with Low, Roger D.) On a mixed boundary value problem for an infinite elastic cone.
- Weiss, Lionel. 668: "Hedging" on statistical assumptions. A sequential test of the equality of probabilities in a multinomial distribution.
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This is a list of headings, with code numbers, under which articles were classified during 1963. The headings in capital letters are essentially ider total with those appearing in the 1963 monthly issues.

#### GENERAL

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- 00 General mathematics
- 02 Other fields
- 04 Collections of papers
- General textbooks and handbooks
- 10 Collections of formulas
- 20 Bibliographies
- 30 Dictionaries and other reference works
- 40 Reports of meetings
- 45 Mathematics as an occupation
- 50 Methodology and philosophy of mathematics
- 55 Philosophy of science, general
- 60 Relation of mathematics with the humanities
- 70 Didactics
- 80 General popularizations
- 90 Recreational mathematics, miscellaneous

#### HISTORY AND BIOGRAPHY

- 05 Ancient
- 10 India, Far East, Maya, etc.
- 15 Medieval and Renaissance
- 20 17th century
- 25 18th century
- 30 19th century
- 35 20th century
- Contemporary
- Biographies, obituaries, personalia
- 60 Collected or selected works; reprintings or translations of classics
- 70 Source books

#### 02. LOGIC AND FOUNDATIONS

- 15 Formalizing verbal reasoning
- 20 Syntax, semantics, deducibility
  30 Propositional calculus: two-valued
- 32 Logical calculus: first-order, two-valued (functional calculus)
- 40 Logistic, axiomatic set theory, paradoxes
- 50 Many-valued logic, modal logic
- 60 Recursive function theory, Turing computability
- 70 Intuitionism
- 75 Axioms for mathematical systems
- 80 Metatheorems for mathematical systems 90 Undecidability, unsolvability in mathematical systems

#### 04. SET THEORY

- 15 Point sets
- 20 Relations
- 30 Transfinite numbers
- 35 Problem of the continuum
- 60 Combinatorial (partitions, etc.)

#### COMBINATORIAL ANALYSIS

- 10 Partitioning, subsets, etc.
- 20 Matrices, magic squares, block designs, configurations 30 Factorials, binomial coefficients, polynomials, power series
- 40 Graphs
- 50 Enumeration of graphs

#### 06. ORDER, LATTICES

- 10 Total order
- 20 Partial order
- 30 Lattions

- 40 Modular lattices, continuous geometries
- 50 Distributive lattices
- 60 Boolean algebras and rings
- 70 Boolean algebras with operators

#### 08. GENERAL MATHEMATICAL SYSTEMS

#### 10. THEORY OF NUMBERS

- 005 Tables
- 01 Elementary
- 02 Divisibility and factorization
- 03 Arithmetical functions
- 04 General elementary theory of congruences; Diophantine equations of degree 1
- 05 Power residues and reciprocity laws, primitive roots, indices; General binomial congruence
- 06 Continued fraction, decimal and other algorithmic expansions
- 07 Combinatorial problems
- 08 Special integers (or rationals), special sequences of integers (or rationals)
- 09 Arithmetic properties of special functions; integer-valued polynomials
  - Diophantine equations
- 12 Polynomial Diophantine equations of degree 1
- 14 Fermat conjecture
- 16 Miscellaneous Diophantine equations (exponential, etc.)
- 18 Rational points on algebraic varieties
- 20 Diophantine approximation
- 25 Continued fractions
- 26 Distribution of digits (for any type of expansion)
- 28 Irrationality, transcendence
- 30 Forms
- 31 Linear forms
- 32 Quadratic and hermitian forms
- 34 Forms of degree 2
- 40 Geometry of numbers
- 42 Lattices; convex and other bodies
- 44 Products of linear forms
- Exponential and power sums 50
- 52 Character sums
- 53 Lattice points
- 54 Turán's method
- 55 Modular and automorphic functions, forms, and groups
- 60 Multiplicative asymptotic theory
- 62 Zeta-function and other Dirichlet series 64 Character sums, asymptotic theory
- 65 Distribution of primes
- 70 Additive asymptotic theory
- 72 Sums of squares, Waring's problem
- 74 Partitions
- 75 Sequences of integers (additive bases, density theorems, etc.) 80 Probabilistic number theory
- 82 Distribution mod 1
- 84 Regular distribution
- 85 Arithmetic of hypercomplex numbers
- 90 Algebraic number theory
- 91 Quadratic fields
- 92 Cyclotomic fields
- 95 Class field theory
- 96 Algebraic function fields
- 97 p-adic fields
- Finite fields

#### SUBJECT CLASSIFICATION

#### 12. FIELDS AND POLYNOMIALS

- 20 Finite fields
- 30 Polynomials
- 40 Galois theory
- 50 Algebraic number fields
- 60 Algebraic function fields
- 70 Valuations, topological fields
- 80 Differential and difference algebra

#### II. ABSTRACT ALGEBRAIC GEOMETRY (for classical algebraic geometry, see 50.00)

- Theories of equivalence
- 15 Transformations and correspondences
- 20 Curves
- 35 Algebraic properties of function fields
- 40 Arithmetical properties of varieties
- 45 Algebraic geometry over special fields or over rings; rationality questions
- 50 Group varieties, abstract analytic groups
- 52 Abstract derivations and differentials
- 55 Sheaf-theoretic and homological methods
- 60 Birational invariants, genera, etc.

#### 15, LINEAR ALGEBRA

- 05 Vector spaces
- 15 Linear inequalities
- 20 Inequalities involving eigenvalues and eigenvectors
- 25 Miscellaneous inequalities involving matrices
- 30 Eigenvalues and eigenvectors
- 33 Canonical forms, reductions
- 36 Linear sets of linear transformations
- 38 Matrix equations and identities
- 39 Invarianta
- 40 Multilinear algebra
- 48 Determinants
- 49 Permanenta
- 50 Linear equations, matrix inversion

#### 16. ASSOCIATIVE RINGS AND ALGEBRAS

- 10 Ideal theory
- 15 Commutative ideal theory
- 20 General commutative theory
- 24 Polynomials
- 26 Formal power series
- 28 Local rings
- 30 Division rings, simple rings and algebras
- 40 Radical theory
- 45 Rings with chain condition
- 50 Linear representations of rings and algebras (including orders)
- 60 Modules
- 70 Galois theory
- Ordered rings 80
- 90 Topological rings
- 95 Semi-rings, etc.

#### 17. NON-ASSOCIATIVE RINGS AND ALGEBRAS

#### IS. HOMOLOGICAL ALGEBRA

#### 20. GROUP THEORY AND GENERALIZATIONS

- 10 Free groups, relations
- 14 General products of groups
- 16 Group extensions
- 20 Permutation groups
- 25 Finite groups (including finite abelian)
- 28 Burnside problem, conditions for finiteness
- 30 Abelian groups, general theory
- 40 Nilpotent, solvable, p-groups
- 45 Groups with local properties
- 50 Lattices of subgroups

- Special subgroups
- Crystallographic and discrete geometric groups 60
- 45 Modular groups, discrete subgroups of classical groups
- 70 Classical groups
- 75 Linear groups, general 80 Representations, characters, group algebras 85 Representations of symmetric groups
- Automorphisms and endomorphisms, groups with operators 88
- Ordered groups, ordered semigroups
- Semigroups
- 94 Groupoids
- Quasigroups
- 98 Loops

#### 22. TOPOLOGICAL GROUPS AND LIE THEORY

- 10 Topological groups
- 12 Haar measures
- 15 Topological algebras
- 40 Transformation groups
- 50 Lie groups
- Classical groups 55
- 60 Representations and analysis
- Homogeneous spaces (topology, differential geometry) 70
- 80 Lie algebras
- 90 Abstract Lie theory
- Infinite Lie groups
- 99 Lie theory of differential equations

#### 26. FUNCTIONS OF REAL VARIABLES

- 10 Foundations: limits and generalizations [elementary topology of the line (or plane) if used for real variables]
- Calculus: elementary, advanced, etc.
- 21 Elementary functions
- 30 Continuity and related questions (modulus of continuity [if not used in boundary behaviour of analytic functions], discontinuities, etc.)
- 40 Differentiation: general theory
- 41 Non-differentiability (non-differentiable functions, points of non-differentiability), discontinuous derivatives
- 43 Generalized derivatives, derivatives of fractional order
- Mean-value theorems
- Monotonic functions, general
- 51 Functions of bounded variation; absolute continuity
- 52 Convexity; generalizations
- 53 Generalized monotonic functions
- 55 Several variables, implicit function theorems, Jacobians. Transformations with several variables
- 56 Length, area, volume
- 60 Polynomials
- Inequalities (of a general and miscellaneous character)
- 80 Real-analytic functions
- 81 Quasi-analytic classes of real functions, functions of class  $C^{\infty}$
- 85 Superposition of functions

#### 28. MEASURE AND INTEGRATION

- 10 Measurable sets, general: Borel fields, non-measurable sets
- 12 Analytic and Suslin sets
- Finitely additive set functions, measures; generalizations 13
- 15 Special and generalized measures, Carathéodory theory of
- 17 Transfinite diameter and capacity. Hausdorff measures and capacities
- 20 Measurable and non-measurable functions
- 25 Integration, general
- Riemann integral, Lebesgue integral, Denjoy integral, etc.
- Measure-preserving transformations
- 31 Invariant measures
- 32 Ergodic theorems
- 33 Dynamical systems
- 40 Length, area, volume
- 41 Other geometric measure theory

#### 30. FUNCTIONS OF A COMPLEX VARIABLE

- 01 General questions, foundations
- 02 Monogenic properties of complex functions (also polygenic and areolar monogenic functions)
- 00 Inequalities in the complex domain
- 10 Polynomials
- 11 Zeros of polynomials
- 20 Power series
- 21 Behavior on the boundary of convergence. Overconvergence
- 24 Dirichlet series
- 25 Continued fractions
- 28 Analytic continuation
- 30 Sequences and series of analytic functions; uniform convergence, normal families, normal functions
- 35 Integration; integral representations; Cauchy integral, Poisson and Poisson-Stieltjes integrals
- 36 Moment problems; interpolation problem
- 40 Conformal mapping, general theory
- 41 Capacity, harmonic measure
- 42 Univalent and p-valent functions
- 43 Coefficient problems
- 45 Riemann surfaces, uniformization
- 46 Algebraic functions, Abelian integrals
- 47 Quasiconformal mapping
- 49 Automorphic functions and modular functions
- 50 Maximum principle. Schwarz's lemma, Phragmén-Lindelöf
- 52 Extremal problems in complex domain
- 55 Entire functions

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- 60 Meromorphic functions, general theory
- 61 Distribution of values, Picard-type theorems, Nevanlinna theory, defect (deficiency) theory
- 52 Theory of cluster sets, prime ends, boundary behavior
- 65 Bounded functions, positive real part, Blaschke products
- 66 Bounded mean modulus, bounded characteristic
- 67 H, classes and other restrictions
- 70 Approximation by polynomials and rational functions, Faber polynomials
- 75 Boundary-value problems, Dirichlet problem
- 77 Special boundary-value problems; Riemann-Hilbert problem. Inverse boundary problems
- 79 Algebroidal functions
- 80 Topological function theory, functions topologically equivalent to analytic mappings
- 81 Generalized analytic mappings. Pseudo-analytic functions of Bers. Vekus. etc.
- 83 Functions of hypercomplex variables and generalized variables
- 85 Spaces of analytic functions
- 86 Kernel function and applications
- 87 Algebras of analytic functions

#### 31. POTENTIAL THEORY

- 10 Harmonic functions in the plane
- 11 Harmonic functions, general
- 15 Subharmonic, superharmonic functions
- 20 Boundary-value problems, Dirichlet problem
- 21 Capacity and harmonic measure
- 22 Generalized capacity and potential
- 30 Biharmonic and polyharmonic functions and equations
- 35 Poisson's equation

#### 32. SEVERAL COMPLEX VARIABLES

- 02 Foundations, general questions
  - 10 Multiple power series, formal theory
  - 15 Analytic and meromorphic curves
  - 20 Holomorphic mappings, domains of holomorphy, analytic spaces (see also 57.00)
  - 25 Automorphic functions
  - 30 Approximation theorems

#### 33. SPECIAL FUNCTIONS

04 Number-theoretic functions, special sequences

- 05 Tables of special functions
- 10 Exponential and trigonometric functions
- 15 Gamma and Beta functions
- 17 Error function, probability integral
- 19 Elliptic functions and integrals
- 20 Hypergeometric functions
- 21 E-functions
- 25 Cylindrical functions; Bessel functions
- 27 Spherical functions; Legendre polynomials and functions, spherical harmonics, ultraspherical polynomials
- 28 Lamé, Mathieu, spheroidal wave functions
- 30 Wave functions
- 32 Gegenbauer functions
- 40 Orthogonal polynomials, general (Chebyshev, Hermite, Jacobi, Laguerre polynomials and functions)

#### 34. ORDINARY DIFFERENTIAL EQUATIONS

- 02 Solutions in closed form; integration by quadratures; reduction of differential equations
- 03 Operational calculus
- 04 General existence and uniqueness theorems, Picard approximations and generalizations
- 07 Continuous dependence of solution on parameter
- 10 Analytic theory
- 20 Linear equations and systems, general coefficients
- 21 Linear equations with constant coefficients
- 22 Linear equations with periodic and almost periodic coefficients
- 30 Boundary-value problems, linear equations
- 31 Sturm-Liouville theory
- 32 Eigenvalues, eigenfunctions
- 33 Eigenfunction expansions
- 34 Asymptotic properties of eigenfunctions
- 36 Boundary-value problems, non-linear
- 40 Qualitative theory of first- and second-order equations and systems; singular points and limit cycles
- 41 Periodic and almost periodic solutions
- 42 Non-linear oscillations
- 43 Stability of first- and second-order equations and systems
- 50 Qualitative theory of equations and systems of order greater than 2; asymptotic behavior of solutions
- 51 Stability; periodic and almost periodic solutions
- 53 Perturbations
- 54 Singular perturbations; small parameter with highest derivative
- 60 Stochastic differential equations
- 65 Dynamical systems, systems on manifolds
- 70 Equations and systems of infinite order
- 75 Difference-differential equations
- 76 Solution by finite differences
- 80 Differential equations in Banach and other spaces
- 85 Optimal control problems

#### 35. PARTIAL DIFFERENTIAL EQUATIONS

- 65 General properties of solutions, Cauchy-Kowalewski theorems, etc.
- 10 First-order equations and systems
- 12 Classification of equations and systems
- 13 Exact equations and integrable systems. Pfaffian equations
- 15 Characteristics
- 20 Separation of variables, elementary properties of the equations of mathematical physics
- 30 Elliptic equations and systems of first and second order
- 31 Strongly elliptic systems
- 32 Quasi-linear elliptic equations and systems
- 33 Schrödinger equation, wave equation
- 34 Maxwell's equations, Helmholtz equation 35 Spectral analysis, eigenfunctions, operators
- 36 Elliptic systems and equations of higher order 37 Biharmonic equation
- 40 Hyperbolic equations and systems of second order
- 41 Quasi-linear hyperbolic systems and equations of second order

#### SUBJECT CLASSIFICATION

- 35. 45 Hyperbolic equations and systems of higher order
  - 50 Parabolic equations of second order
  - Equations of mixed type and second order 55
  - Mixed type, order higher than two 56
  - 60 Non-linear equations and systems
  - 62 Approximation of solutions
  - 63 Solution by finite differences
  - 65 Special equations: Navier-Stokes, etc.
  - 70 Asymptotic properties
  - 75 Infinite systems, equations of infinite order
  - Equations in Banach spaces and other spaces an

# 39. FINITE DIFFERENCES AND FUNCTIONAL EQUATIONS

- 10 Finite differences, general
- 12 Solution of ordinary differential equations by finite differences
- 13 Solution of partial differential equations by finite differences
- 20 Difference equations
- 30 Functional equations

#### 40. SEQUENCES, SERIES, SUMMABILITY

- 10 Series and sequences of numbers, general
- 11 Infinite products
- 12 Continued fractions
- 13 Convergence
- 15 Multiple series and sequences
- 20 Sequences and series of functions, convergence
- 30 Summability, general methods 31 Summability, matrix methods
- 32 Cesàro summability
- 33 Abel, Poisson summability
  35 Summability of double series
- 40 Convergence and summability of integrals
- 42 Tauberian theorems

# 41. APPROXIMATIONS AND EXPANSIONS

- 10 Interpolation
- 15 Polynomial approximation
- 17 Approximation by rational functions
- 20 Approximate quadratures
- 40 Rate of convergence, degree of approximation, best approxi-
- 41 Constructive theory of functions
- 45 Approximation by smoothing integrals
- 50 Asymptotic approximations
- 55 Other methods of approximation

- 42. FOURIER ANALYSIS
  05 Trigonometric polynomials
  - Best approximation by trigonometric polynomials 90
  - Trigonometric interpolation 08
  - 10 Fourier coefficients
  - Convergence of Fourier series 11
  - 15 Orthogonal functions
  - 16 Expansions in orthogonal functions
  - 17 Completeness of sets of orthogonal functions
  - 18 Completeness, closure, spectral synthesis
  - 20 Summability of Fourier and generalized Fourier expansions
  - 25 Fourier transform
  - 26 Other Fourier-type transforms
  - 27 Trigonometric moment problems
  - 30 Almost periodic functions
  - 35 Positive definite functions
  - 40 Multiple Fourier series and integrals
  - 50 Abstract harmonic analysis

#### 44. INTEGRAL TRANSFORMS, OPERATIONAL CALCULUS

- 10 Laplace transform
- 25 Convolution

- 28 General transforms
- 30 Special transforms: Legendre, Hilbert, etc.

53

- 32 Multiple transforms
- 40 Operational calculus
- 42 Operational calculus in several variables
- 50 Fractional derivatives and integrals
- 60 Moment problems

#### 45. INTEGRAL EQUATIONS

- 10 Linear integral equations, general
- 11 Fredholm equations
- 12 Eigenvalue problems
- 13 Volterra equations
- 15 Singular equations
- 20 Systems of linear equations
- 30 Non-linear integral equations 31 Singular non-linear equations
- 40 Integro-differential equations

#### 46. FUNCTIONAL ANALYSIS

- 10 Topological linear spaces (including normed spaces and Hilbert spaces)
- 20 Partially ordered linear spaces
- 30 Special function spaces
- 40 Distributions
- 50 Single linear operators in linear or partially ordered spaces
- 60 Groups or semigroups of linear operators, representations of topological groups
- 65 Rings of operators, group algebras, abstract topological algebras, and their representations
- 70 Banach algebras of analytic functions
- 80 Differential and integral operators
- 90 Applications of functional analysis

#### 49. CALCULUS OF VARIATIONS

#### 50. GEOMETRY

- 05 Foundations
- 10 Euclidean 11 Triangles, tetrahedra
- 12 Circles, spheres
- 14 Constructions
- 15 Descriptive geometry
- 17 Analytic geometry
- 20 Affine geometry, general 25 Transformations
- 30 Projective geometry, general
- 35 Transformations
- 40 Non-Euclidean geometry (i.e., hyperbolic or elliptic)
- 46 Minkowski geometry
- 48 Special geometries
- 50 Classical algebraic geometry
- 51 Foundations
- 52 Transformations
- 55 Curves
- 56 Surfaces
- 57 Abelian varieties, genera, integrals
- 60 Finite geometries
- 70 Projective planes
- 80 Configurations
- 90 Regular figures, divisions of space
- 95 Paradoxical decompositions

#### 52. CONVEX SETS AND GEOMETRIC INEQUALITIES

- 10 Convex polyhedra
- 25 Convex curves
- 30 Convex regions
- 34 Helly-type theorems 40 Extremum problems and geometric inequalities
- 45 Packing and covering
- 50 Distance geometries

#### 53. DIFFERENTIAL GEOMETRY

- Curves and surfaces in Euclidean spaces 01
- 04 Minimal surfaces
- Affine differential geometry 10
- Projective differential geometry
- 25 Conformal differential geometry
- Non-Euclidean differential geometry 30
- 32 Other special differential geometries
- 35 Vector and tensor analysis
- 38 Spinor analysis
- Differentiable manifolds (general theory), e.g., definitions, 40 jets, tangent bundles
- 42 Differential invariants (local theory), geometric objects
- Differential calculus (global theory); forms, currents, integration, tensor fields, etc.
- Connections (general theory), including G-structures
- 55 Affine connections
- 60 Projective connections
- Conformal connections
- Local Riemannian geometry 70
- 72 Riemannian manifolds
- Global surface theory (convex surfaces)
- 78 Lorentz metrics and generalizations
- 80 Kählerian connections and generalizations
- 85 Finsler spaces and generalizations (areal metrics)
- Integral geometry

of

Other generalizations (G-spaces of Busemann, etc.)

### 54. GENERAL TOPOLOGY

- 10 Axiomatics; generalizations of topological spaces
- 20 General topological spaces
- 21 Convergence notions
- Compactness and generalizations
- 23 Compactifications, other extensions
- 24 Proximity spaces
- Uniform spaces 25
- 26 Metric spaces, metrizability
- 27 Dimension theory
- 28 Mappings
- 29 Many-valued mappings
- 30 Continua
- Topological semigroups, lattices, etc. 35
- Topology of E2, 2-manifolds 40
- Topology of  $E_n$ , n-manifolds (n > 2)50
- Transformation groups 70
- Topological dynamics
- Fixed-point theorems, coincidence theorems, etc.

#### 55. ALGEBRAIC TOPOLOGY

- 10 Graphs, map-coloring
- 20 Knots, links
- 30 Homology and cohomology theory
- 32 Sheaves
- Cohomology (and homology) operations, Steenrod algebra
- Periodic transformations, fixed points, coincidences (Smith 26 theory)
- 28 Dimension theory
- Homotopy theory, general 40
- Algebra of mappings (including cohomotopy groups)
- Computation of homotopy groups 45
- 50 Fiber spaces
- 52 Spectral sequences
- Manifolds 60
- Classification
- 64 Mappings
- 66 Generalized manifolds, local homology
- 68 Homotopy manifolds
- 70 Imbedding, immersion

#### 57. TOPOLOGY AND GEOMETRY OF DIFFERENTIABLE MANIFOLDS

- 10 Differentiable structures, cobordism
- Differentiable mappings, imbeddings, immersions, diffeomor-
- Fiber bundles, tangent bundles
- Characteristic classes 32
- 34 Topology of vector and tensor fields
- 36 Foliations
- 40 Topology of Lie groups
- 45 Topology of homogeneous spaces
  50 Analysis on differentiable manifolds
- 60 Complex manifolds (also in several complex variables)
- 70 Infinite Lie groups, deformations

#### 60. PROBABILITY

- 05 Foundations
- 10 Combinatorial probability theory
- 15 Geometric probability theory
- 20 Distributions
- 30 Limit theorems
- 40 Stochastic processes, general theory
- 45 Markov processes
- 48 Branching processes
- 50 Stationary processes
- 55 Random walks, Brownian motion
- 60 Queueing theory, telephone traffic, storage
- 62 Renewal theory
- 65 Other special processes
- 70 Random noise
- 90 Other applications

#### 62. STATISTICS

- 05 Elementary descriptive statistics
- 10 Distributions of statistical functions
- 20 Estimation theory: parametric case
- 25 Testing of hypotheses: parametric case
- 30 Multivariate analysis, regression analysis
- 35 Order statistics
- 40 Non-parametric methods
- 50 Analysis of experiments
- 55 Design of experiments
- 60 Decision theory
- 65 Multistage decision procedures, sequential analysis
- 70 Statistical engineering, quality control
- 75 Life testing
- Sampling surveys
- Statistical analysis of stochastic processes, time series analysis 85
- 90 Applications

#### 65. NUMERICAL METHODS

- 05 General mathematical methods, iteration
- 15 Monte Carlo methods
- 20 Interpolation, smoothing, least squares, curve fitting, approximation of functions
- 25 Computation of special functions, series, integrals
- Mathematical programming
- 35 Linear equations, determinants, matrices
- 40 Eigenvalues, eigenvectors, Rayleigh-Ritz method 80
- Solution of algebraic and transcendental equations and systems Numerical differentiation and integration, mechanical quadra-55
- Ordinary differential equations
- 65 Partial differential equations
  70 Difference and functional equations
- Integral and integro-differential equations Error analysis
- 85 Graphical methods, nomography
- 90 Harmonic analysis and synthesis
- 95 Tables

#### SUBJECT CLASSIFICATION

#### 68. COMPUTING MACHINES

# 69. GENERAL APPLIED MATHEMATICS

#### 70. MECHANICS OF PARTICLES AND SYSTEMS

- 10 Foundations
- Station 20
- 30 Kinematics, mechanisms, linkages
- 40 Dynamics
- 50 Oscillations, stability
- 55 Non-linear oscillation
- 60 Exterior ballistics

# 70 Variable mass, rockets 73. ELASTICITY, PLASTICITY

- 05 Foundations of mechanics of deformable solids
- Foundations of mechanics of deformable solids
  Elasticity: general theorems
- 07 Finite deformation
- 10 Plane stress and strain
- 15 Three-dimensional problems
- 25 Beams and rods
- 30 Plates
- 32 Shelis and membranes
- 35 Anisotropic bodies 37 Dislocation theory
- Dislocation theory 37
- Vibrations, structural dynamics 50 Stability, buckling, failure
  55 Wave propagation. 45

- Wave propagation, impact
- Visco-elasticity 65
- 70 Plasticity, creep
- 80 Soil mechanics
- 90 Thermo-mechanics

#### 76. FLUID MECHANICS, ACOUSTICS

- 05 Foundations
- 10 Incompressible fluids: general theory
- 15 Incompressible fluids with special boundaries
- 17 Airfoil theory
- . Free surface flows, water waves, jets, wakes 20
- Viscous fluids 95
- 30 Boundary layer theory
- 35 Stability of flow
- 37 Convection
- 40 Turbulence
- 45 Rarefied gas flow
- Rarefied gas flow Compressible fluids: general theory
- Compressible fluids: subsonic flow
- Compressible fluids: transonic flow 60
- Compressible fluids: supersonic and hypersonic flow 65
- 70 Shock waves
- Aero- and hydrodynamic sound
- 85 Non-Newtonian fluids
- 90 Magnetohydro- and aerodynamics, ionized gas flow (see also 78.30 : 82.25 : 85.50)
- Quantum hydrodynamics
- 93 Relativistic hydrodynamics
- 95 Diffusion, filtration

# OPTICS, ELECTROMAGNETIC THEORY, CIRCUITS

- 65 Geometrie optics
- 10 Physical optics
- 20 Electron optics
- Space charge waves
- Electromagnetic theory
- 45 Eiectro- and magnetostatics
- 50 Waves and radiation
- 60 Diffraction, scattering
- 70 Antennas, wave-guides
- Circuits, networks (for switching theory, see 94.70)
- 90 Technical applications

#### 80. CLASSICAL THERMODYNAMICS, HEAT TRANSFER

- 10 Classical thermodynamics
- 20 Heat and mass transfer
- 30 Combustion, interior ballistics
- 40 Chemical kinetics

# 81. QUANTUM MECHANICS

- 10 General theory
- 15 Scattering theory
- 20 Mathematical field theory
- 22 Dispersion relations
- 24 Weak interactions
- 26 Elementary particles
- 28 Nuclear physics

- 38 Molecular physics 50 Quantum mechanics of many-body systems
- 60 Superconductivity and superfluidity
  70 Quantum statistical mechanics
- 70 Quantum statistical mechanics

#### 82. STATISTICAL PHYSICS, STRUCTURE OF MATTER

93

- 05 General statistical mechanics
- 10 Quantum statistical mechanics
- 15 Statistical thermodynamics
- 17 Irreversible thermodynamics
- 20 Kinetic theory of gases
- 25 Plasma (sce also 76.90)
- 30 Liquids
- 40 Solida
- 45 Crystals
- 50 Metals
- 60 Transport processes
- 65 Nuclear reactor theory

#### 83. RELATIVITY

- 10 Special relativity
- 20 General relativity
- 30 Unified field theories 40 Other relativistic theories

# 85. ASTRONOMY

- 10 Celestial mechanics
- 15 Galactic and stellar dynamics
- 15 Galactic and s-body problems
- 30 Stellar structure
- 40 Stellar atmospheres, radiative transfer
- 50 Hydrodynamic and hydromagnetic problems
- 60 Statistical astronomy 70 Cosmology
- 80 Special problems
- 90 Radio astronomy

#### 86. GEOPHYSICS

- 10 Hydrology, hydrography, oceanography
- 20 Meteorology
- 30 Seismology
- 40 Potentials, prospecting
- 50 Geo-electricity and magnetism 60 Geodesy, mapping problems
- 70 Atmospheric physics

### 90. ECONOMICS, OPERATIONS RESEARCH, GAMES

- 05 Decisions, utility
- 10 Economic models
- 15 Economic time-series analysis
- 17 Miscellaneous applications to economics
- 30 Management science, operations research
- 35 Highway traffic

#### SUBJECT CLASSIFICATION

- 40 Actuarial theory
- 50 Linear programming
- 52 Transportation problems
- 54 Flows in networks

- 58 Non-linear programming Logistics, inventory, storage
- 70 Games
- 80 n-person games

#### 92. BIOLOGY AND BEHAVIORAL SCIENCES

- 10 Biology
- 20 Genetics
- 30 Population dynamics, epidemiology 40 Sociology

- 50 Psychology
- 55 Nervous networks

#### 94. INFORMATION, COMMUNICATION, CONTROL

- 05 Foundations, coding theorem
- 10 Statistical theory of communication channels, filters

- 15 Codes, decoding 20 Data processing 30 Linguistics, machine translation
- 55 Control systems 57 Stability of control systems
- 60 Optimal control 65 Random control
- 65 Random control
  70 Switching theory, relays
- 90 Automata

#### ABBREVIATIONS OF NAMES OF JOURNALS

This list gives the form of references used in MATHEMATICAL REVIEWS and the complete title; the place of publication and other pertinent information are given in parentheses when desirable for clarity.

- Abh. Akad. Wies. Göttingen Math.-Phys. Kl. Abhandlungen der Akademie der Wissenschaften in Göttingen. Mathematisch-Physikalische Klasse. (Göttingen)
- Abh. Deutsch. Akad. Wiss. Berlin Kl. Math. Phys. Tech. Abhandlungen der Deutschen Akademie der Wissenschaften zu Berlin. Klasse für Mathematik, Physik und Technik. (Berlin)
- Abh. Dokumentationszentrums Technik Wirtschaft. Abhandlungen des Dokumentationszentrums der Technik und Wirtschaft. (Vienna)
- Abh. Math. Sem. Univ. Hamburg. Abhandlungen aus dem Mathematischen Seminar der Universität Hamburg. (Hamburg)
- Abh. Säche, Akad. Wiss. Leipzig Math.-Nat. Kl. Abhandlungen der Sächnischen Akademie der Wissenschaften zu Leipzig. Mathematisch-Naturwissenschaftliche Klasse. (Leipzig) (Formerly: Abh. Säche, Akad. Wiss. Math.-Nat. Kl.)
- Abh. Sächs. Akad. Wiss. Math.-Nat. Kl. Abhandlungen der Sächsischen Akademie der Wissenschaften zu Leipzig. Mathematisch-Naturwissenschaftliche Klasse. (Leipzig) (Continued as: Abh. Sächs. Akad. Wiss. Leipzig Math.-Nat. Kl.)
- Acad. R. P. Romine An. Romino-Soviet. Ser. Mat.-Fis. Academia Republicii Populare Romine. Institutul de Studii Rominc-Sovietic. Analele Romino-Sovietice. Seria Matematică-Fixică. Rumyno-Sovetskie Zapiaki. Fixiko-Matematiceakaja Serija. (Bucharest)
- Acad. R. P. Romine Baza Cerc. Ști. Timișoara Stud. Cerc. Ști. Tehn. Academia Republicii Populare Romine. Baza de Cercetări Științifice Timișoara. Studii și Cercetări Științe Tehnice. (Timișoara)
- Acad. R. P. Romine Fil. Cluj Stud. Cerc. Mat. Academia Republicii Populare Romine. Institutul de Calcul. Filiala Cluj. Studii şi Cercetări de Matematică. (Cluj) (Formerly: Acad. R. P. Romine Fil. Cluj Stud. Cerc. Mat. Fis.)
- Acad. R. P. Romine Fil. Cluj Stud. Cerc. Mat. Fiz. Academia Republicii Populare Romine. Filiala Cluj. Studii și Cercetări de Matematică și Fizica. (Cluj) (Continued as: Acad. R. P. Romine Fil. Cluj Stud. Cerc. Mat.)
- Acad. R. P. Romine Fil. Iagi Stud. Cerc. Ști. Fiz. Ști. Tehn. Academia Republicii Populare Romine. Filiala Iași. Studii și Cercetări Stiințifice. Fizică și Științe Tehnice. (Iași)
- Acad. B. P. Romîne Fil. Iași Stud. Cerc. Ști. Mat. Academia Republicii Populare Romîne. Filiala Iași. Studii și Cercetări Științifice. Matematică. (Iași)
- Acad. R. P. Romine Stud. Corc. Mat. Academia Republicii Populare Romine. Institutul de Matematică. Studii și Cercetări Matematice. Matematičeskie Trudy i Isaledovanija. Etudos et Recherches Mathématiques. (Bucharest)
- Acad. R. P. Romîne Stud. Cerc. Mec. Apl. Academia Republicii Populare Romîne. Institutul de Mecanică Aplicată "Traian Vuia". Studii și Cercetări de Mecanică Aplicată. (Bucharest)
- Acad. Roy. Belg. Bull. Cl. Sci. Académie Royale de Belgique. Bulletin de la Classe des Sciences. Koninklijke Belgische Academie. Mededelingen van de Klasse der Wetenschappen. (Brussels)
- Acad. Roy. Belg. Cl. Sci. Mém. Coll. in-8°. Académie Royale de Belgique. Classe des Sciences. Mémoires. Collection in-8°. Koninklijke Belgische Academie. Klasse der Wetenschappen. Verhandelingen. Verzameling in-8°. (Brussels)
- Acad. Serbe Sci. Arts Glas Cl. Sci. Math. Nat. Académie Serbe des Sciences et des Arts. Glas. Classe des Sciences Mathématiques et Naturelles. Nouvelle Série. (Belgrade) (Formerly: Glas Srpeke Akad. Nauka Od. Prirod.-Mat. Nauka)

Acad. Serbe Sci. Publ. Inst. Math. Académie Serbe des Sciences. Publications de l'Institut Mathématique. (Belgrade) (Continued as: Publ. Inst. Math. (Beograd)) Al

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- Accad. Naz. Sci. Lett. Arti Modena Atti Mem. Accademia Nazionale di Scienze Lettere e Arti. Modena. Atti e Memorie. (Modena) (Formerly: Accad. Sci. Modena Atti Mem.)
- Accad. Sci. Modena Atti Mem. Accademia di Scienze, Lettere e Arti di Modena. Atti e Memorie. (Modena) (Continued as: Accad. Naz. Sci. Lett. Arti Modena Atti Mem.)
- Acta Acad. Abo. Math. Phys. Acta Academiae Aboensis. Mathematica et Physica. (Abo=Turku)
- Acta Arith. Polska Akademia Nauk. Instytut Matematyczny. Acta Arithmetica. (Warsaw)
- Acta Astronom. Sinica. Acta Astronomica Sinica. (Peking)
- Acta Biotheor. Acta Biotheoretica. (Leiden)
- Acta Cryst. Acta Crystallographica. (Copenhagen)
- Acta Fac. Nat. Univ. Comenian. Acta Facultatis Rerum Naturalium Universitatis Comenianae. (Bratislava)
- Acta Math. Acta Mathematica. (Uppsala)
- Acta Math. Acad. Sci. Hungar. Acta Mathematica Academiae Scientiarum Hungaricae. (Budapest)
- Acta Math. Sinica. Acta Mathematica Sinica. (Peking) (Translated as: Chinese Math.)
- Acta Mech. Sinica. Acta Mechanica Sinica. (Peking)
- Acta Phys. Acad. Sci. Hungar. Acta Physica Academiae Scientiarum Hungaricae. (Budapest)
- Acta Phys. Austriaca. Acta Physica Austriaca. (Vienna)
- Acta Phys. Polon. Polska Akademia Nauk. Instytut Fizyki. Acta Physica Polonica. (Warsaw)
- Acta Polytech. Scandinav. Acta Polytechnica Scandinavica. (Stockholm)
- Acta Sci. Math. (Szeged). Acta Universitatis Szegediensis. Acta Scientiarum Mathematicarum. (Szeged)
- Acta Tech. Acad. Sci. Hungar. Acta Technica Academiae Scientiarum Hungaricae. (Budapest)
- Acta Univ. Debrecen. Acta Universitatis Debreceniensis de Ludovico Kossuth Nominatae. (Debrecen)
- Acta Univ. Lund. N.S. (Lund) See Lunds Univ. Arsakr. Avd. 2.
- Actes Soc. Helv. Sei. Nat. Actes de la Société Helvétique des Sciences Naturelles, Verhandlungen der Schweizerischen Naturforschenden Gesellschaft. Atti della Società Elvetica di Scienze Naturali. (Basel)
- Actualités Sci. Indust. Actualités Scientifiques et Industrielles.
  (Paris)
- Acustica. Acustica. (Zürich)
- Advances in Math. Advances in Mathematics. (New York)
- Advances in Phys. Advances in Physics. A Quarterly Supplement of the Philosophical Magazine. (London)
- Aero. Quart. The Aeronautical Quarterly. (London)
- AIAA J. AIAA Journal. (Easton, Pa.) (Formerly: ARS J. and J. Aerospace Sci.)
- Akad. Nauk Armjan. SSR Dokl. Akademija Nauk Armjanskol SSR. Doklady. (Erevan)

- kad. Nauk Azerbaidian. SSR Trudy Inst. Fiz. Mat. Akademija Nauk Azerbaidianskol SSR. Trudy Instituta Fiziki i Matematiki.
- Akad. Nauk Azerbaidžan. SSR Trudy Inst. Mat. Meh. Akademija Nauk Azerbaidžanskoi SSR. Trudy Instituta Matematiki i Mehaniki. (Baku)
- Akad. Nauk BSSR Trudy Inst. Fiz. Mat. Akademija Nauk Belorus-skol SSR. Institut Fiziki i Matematiki. Trudy Instituta Fiziki i Matematiki. (Minsk)

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- Akad. Nauk Gruzin. SSR Trudy Tbiliss. Mat. Inst. Razmadze. Akademija Nauk Gruzinskoï SSR. Trudy Tbilisskogo Matematičeskogo Instituta im. A. M. Razmadze. (Tiflis)
- Akad. Nauk Kazah. SSR Trudy Astrofiz, Inst. Akademija Nauk Kazahskoï SSR. Trudy Astrofizičeskogo Instituta. (Alma-Ata)
- Akad. Nouk Kazah, SSR Trudy Sekt. Mat. Meh. Akademija Nauk Kazahakol SSR. Trudy Sektora Matematiki i Mehaniki. (Alma-
- Akad, Nauk Latv. SSR Trudy Inst. Fiz. Akademija Nauk Latviiskol SSR. Trudy Instituta Fiziki. (Riga)
- Akad. Nauk SSSR Izv. Sibirsk. Otd. Akademija Nauk SSSR. Izvestija Sibirskogo Otdelenija Akademii Nauk SSSR. (Novosibirsk)
- Akad. Nauk Ukrain. RSR Prikl. Meh. (Kiev) See Prikladna Meh.
- Akad, Nauk Uzbek, SSR Trudy Inst. Mat. Akademija Nauk Uzbekakol SSR. Trudy Instituta Matematiki im. V. I. Romanovskogo. (Tashkent) (Formerly: Akad, Nauk Uzbek, SSR Trudy Inst. Mat. Meh.)
- Akad. Nauk Uzbek. SSR Trudy Inst. Mat. Meh. Akademija Nauk Uzbekskol SSR. Trudy Instituta Matematiki i Mehaniki im. V. I. Romanovskogo. (Tashkent) (Continued as: Akad. Nauk Uzbek. SSR Trudy Inst. Mat.)
- Akad. Wiss. Lit. Mains Abh. Math.-Nat. Kl. Akademie der Wissenschaften und der Literatur in Mainz. Abhandlungen der Mathematisch-Naturwissenschaftlichen Klasse. (Wiesbaden)
- Akust. Beihefte. Akustische Beihefte. (Stuttgart)
- Akust. Z. Akademija Nauk SSSR. Akustičeskii Zurnal. (Moscow) (Translated as : Soviet Physics Acoust.)
- Algebra i Logika Sem. Akademija Nauk SSSR. Sibirskoe Otdelenie. Institut Matematiki. Algebra i Logika. Seminar. (Novosibirsk)
- lgoryimy. Algorytmy. Prace. Instytutu Maszyn Matematycznych. Polskiej Akademii Nauk. (Warsaw)
- Allgemein, Statist, Arch. Allgemeines statistisches Archiv. Organ der Deutschen Statistischen Gesellschaft. (Munich)
- Amer. J. Math. American Journal of Mathematics. (Baltimore, Md.)
- Amer. J. Phys. American Journal of Physics. (New York)
- Amer. J. Sci. American Journal of Science. (New Haven, Conn.).
- Amer. Math. Monthly. The American Mathematical Monthly.
- Amer. Math. Soc. Trunsl. American Mathematical Society Translations. (Providence, R.I.)
- AMR. Applied Mechanics Reviews. (New York)
- An. Acad. Brasil. Ci. Anais da Academia Brasileira de Ciencias. (Rio de Janeiro)
- An. Soc. Ci. Argentina. Anales de la Sociedad Cientifica Argentina. (Buenos Aires)
- An. Ști. Univ. "Al. I. Cuza" Iași Secț. I. Analele Științifice ale Universității "Al. I. Cuza" din Iași. (Seria Nouă). Secțiunea I. (Matematică, Fizică, Chimie). (Iași)
- An. Ști. Univ. "Al. I. Cuza" Iași Sect. II. Analele Științifice ale Universității "Al. I. Cuza" din Iași. (Seria Nouă). Secțiunea II. (Științe Naturale-Geografie). (Iași)

- Akad. Nauk Azerbaidžan. SSR Dokl. Akademija Nauk Azerbaidžanskoi SSR. Doklady. (Baku)

  An. Univ. București Ser. Acta Logica. Analele Universităiii București. Seria Acta Logica. (Bucharest) (Formerly: An. Univ. "U. I. Parhon" București Ser. Acta Logica)
  - An. Univ. "C. I. Parhon" București Ser. Acta Logica. Analele Universității "C. I. Parhon" București. Seria Acta Logica. (Bucharest) (Continued as: An. Univ. București Ser. Acta Logica)
  - An. Univ. "C. I. Parhon" București Ser. Ști. Nat. Analele Universității "C. I. Parhon" București. Seria Științelor Naturii. (Bucharest) (Continued as: An. Univ. C. I. Parhon Ser. Ști. Nat. Mat.-Fiz.)
  - An. Univ. C. I. Parhon Ser. Sti. Nat. Mat.-Fiz. Analele Universității C. I. Parhon. Seria Științele Naturii. Matematică-Fizică. (Bucharest) (Formerly: An. Univ. "C. I. Parhon" București Ser. Sti. Nat.)
  - Ann. Acad. Roy. Belg. Annuaire de l'Académie Royale de Belgique. Jaarboek van de Koninklijke Belgische Academie. (Brussels) See Annuaire Acad. Roy. Belg.
  - Ann. Acad. Sci. Fenn. Ser. A I. Suomalaisen Tiedeakatemian Toi-mituksia. Sarja A. Annales Academiae Scientiarum Fennicae. Series A. I. Mathematica. (Helsinki)
  - Ann. Acad. Sci. Fenn. Ser. A VI. Suomalaisen Tiedeakatemian Toimituksia. Sarja A. Annales Academiae Scientiarum Fennicae. Series A. VI. Physica. (Helsinki)
  - Ann. Assoc. Internat. Calcul Anal. Annales de l'Association Internationale pour le Calcul Analogique. Proceedings of the Inter-national Association for Analog Computation. (Brussels)
  - Ann. Astrophys. Annales d'Astrophysique. (Paris)
  - Ann. Fac. Sci. Univ. Toulouse. Annales de la Faculté des Sciences de l'Université de Toulouse pour les Sciences Mathématiques et les Sciences Physiques. (Toulouse)
  - Ann. Geofie. Annali di Geofisica. Rivista dell'Istituto Nazionale di Geofisica. (Rome)
  - Ann. Human Genetics. Annals of Human Genetics. (London)
  - Ann. Inst. Fourier (Grenoble). Université de Grenoble. Annales de l'Institut Fourier. (Grenoble)
  - Ann. Inst. H. Poincaré. Annales de l'Institut Henri Poincaré. (Paris)
  - Ann. Inst. Statist. Math. Annals of the Institute of Statistical Mathe-
  - Ann. Japan Assoc. Philos. Sci. Annals of the Japan Association for Philosophy of Science. (Tokyo)
  - Ann. Mat. Pura Appl. Annali di Matematica Pura ed Applicata.
  - Ann. Math. Statist. The Annals of Mathematical Statistics. (Baltimore, Md.)
  - Ann. New York Acad. Sci. Annals of the New York Academy of Sciences. (New York)
  - Ann. of Math. Annals of Mathematics. (Princeton, N.J.)
  - Ann. of Sci. Annals of Science. (London)
  - Ann. Physics. Annals of Physics. (New York)
  - Ann. Physik. Annalen der Physik. (Leipzig)
  - Ann. Physique. Annales de Physique. (Paris)
  - Ann. Polon. Math. Polska Akademia Nauk. Annales Polonici Mathematici. (Warsaw)
  - Ann. Ponts Chaussées. Annales de Ponts et Chaussées. (Paris)
  - Ann. Radioélec. Annales de Radioélectricité. (Paris)
  - Ann. Sci. École Norm. Sup. Annales Scientifiques de l'École Normale
  - Ann. Scuola Norm. Sup. Pies. Annali della Scuola Normale Superiore de Pisa. Scienze Fisiche e Matematiche. (Pisa)
  - Ann. Soc. Sci. Bruxelles Sér. I. Annales de la Société Scientifique de Bruxelles. Série I. Sciences Mathématiques, Astronomiques et Physiques. (Brussela)

- Ann. Télécommun. Annales des Télécommunications. (Paris)
- Ann. Univ. Lyon Sect. A. Annales de l'Université de Lyon. Section A. Sciences Mathématiques et Astronomie. (Lyon)
- Ann. Univ. Lyon Sect. B. Annales de l'Université de Lyon. Section B. Sciences Physiques et Chimiques. (Lyon)
- Ann. Univ. Marias Curie-Skłodowska Sect. A. Annales Universitatis Mariae Curie-Skłodowska. Section A. Mathematics. (Lublin)
- Ann. Univ. Mariae Curie-Skłodowska Sect. AA. Annales Universitatis
  Mariae Curie-Skłodowska. Section AA. Physics and Chemistry.
  (Lublin)
- Ann. Univ. Surge. Annales Universitatis Saraviensis. (Saarbrücken)
- Ann. Univ. Sci. Budapest. Ečivče Sect. Math. Annales Universitatis Scientiarum Budapestinensis de Rolando Ečitvčs Nominatae. Sectio Mathematica. (Budapest)
- Ann. Univ. Turku. Ser. A I. Annales Universitatis Turkuensis. Series A. I. (Turku)
- Annuaire Acad. Roy. Belg. Annuaire de l'Académie Royale de Belgique. Jaarboek van de Koninklijke Belgische Akademie. (Brussels) (Formerly listed as: Ann. Acad. Roy. Belg.)
- Annuaire Univ. Sofia Fac. Sci. Phys. Math. Livre 1 Math. Godišnik na Sofiiskija Universitet Fiziko-Matematičeski Fakultet. Kniga 1— Matematika. Annuaire de l'Université de Sofia. Faculté des Sciences Physiques et Mathématiques. Livre 1—Mathématiques. (Sofia)
- Annuaire Univ. Sofia Fac. Sci. Phys. Math. Livre 2 Phys. Godišnik na Sofiiskija Universitet Fiziko-Matematičeski Fakultet. Kniga 2— Fizika. Annuaire de l'Université de Sofia. Faculté des Sciences Physiques et Mathématiques. Livre 2—Physique. (Sofia)
- Anuário Obs. São Paulo. Universidade de São Paulo. Instituto Astrônomico e Geofísico. Anuário do Observatório de S. Paulo. (São Paulo)
- Apl. Mat. Československá Akademie Véd. Aplikace Matematiky. (Prague)
- Appl. Mech. Rev. Applied Mechanics Reviews. (New York) (Some times abbreviated as AMR in the text of Math. Reviews)
- Appl. Statist. Applied Statistics. A Journal of the Royal Statistical Society. (London)
- Arbok Univ. Bergen Mat.-Nat. Ser. Arbok for Universitetet i Bergen. Mat.-Naturv. Serie. (Bergen) (Formerly: Univ. Bergen Arbok. Naturvit. Rekke.)
- Arch. Elektrotech. Archiv für Elektrotechnik. (Berlin-Göttingen-Heidelberg)
- Arch. History Exact Sci. Archive for History of Exact Sciences.
- Arch. Math. Archiv der Mathematik. Archives of Mathematics.
  Archives Mathématiques. (Basel-Stuttgart)
- Arch. Math. Logik Grundlagenforsch. Archiv für mathematische Logik und Grundlagenforschung. (Stuttgart)
- Arch. Mech. Stor. Polska Akademia Nauk. Instytut Podstawowych Problemów Techniki. Archiwum Mechaniki Storowanej. (Warsaw)
- Arch. Rational Mech. Anal. Archive for Rational Mechanics and Analysis. (Berlin)
- Arch. Sci. Soc. Phys. Histoire Nat. Genève. Archives des Sciences. Société de Physique et d'Histoire Naturelle de Genève. (Gensva)
- Archimede. Archimede. Rivista per gli Insegnanti e i Cultori di Matematiche Pure e Applicate. (Florence)
- Ark. Astronom. Arkiv för Astronomi. (Stockholm)
- Ark. Pys. Arkiv för Fysik. (Stockholm)
- Ark. Mat. Arkiv för Matematik. (Stockholm)
- Arkhimedes. Arkhimedes. Suomen Fyyaikkosoura—Finlands Fysikerförening r.y. Suomen Matemasttinen Yhdistys—Finlands Matematiaka Förening r.y. (Helsinki)

ARS J. ARS Journal. A Publication of the American Rocket Society. (Easton, Pa.) (Continued as: AIAA J.)

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- Assoc. Roy. Actuair. Belges Bull. Association Royale des Actuaires Belges. Bulletin. (Brussels)
- Astronaut. Acta. Astronautica Acta. (Vienna)
- Astronom. J. The Astronomical Journal. (New Haven, Conn.)
- Astronom. Jber. Astronomischer Jahresbericht. (Berlin)
- Astronom. Nachr. Astronomische Nachrichten. (Berlin)
- Astronom. Z. Akademija Nauk Sojuza SSR. Astronomičeskil Žurnal. (Moscow) (Translated as: Soviet Astronom. AJ)
- Astrophys. J. The Astrophysical Journal. (Chicago, Ill.)
- Astrophys. Norvegica. Det Norske Videnskaps-Akademi i Oslo. Astrophysical Norvegica. (Oslo)
- Atatürk Üniv. Yayınları Ser.-Mat. Atatürk Üniversitesi Yayınları.
  Araştırmalar Serisi—Matematik. Publications of Atatürk University.
  Research Series—Mathematics. (Erzurum)
- Atti Accad. Gioenia Catania. Atti della Accademia Gioenia di Scienze Naturali in Catania. (Catania)
- Atti Accad. Ligure. Atti della Accademia Ligure di Scienze e Lettere.
  (Genoa)
- Atti Accad. Naz. Lincei Mem. Cl. Sci. Fis. Mat. Nat. Sez. I. Atti della Accademia Nazionale dei Lincei. Memorie. Classe di Scienze Fisiche, Matematiche e Naturali. Sezione I<sup>a</sup>. (Matematica, Meccanica, Astronomia, Geodesia e Geofisica). (Rome)
- Atti Accad. Naz. Lincei Mem. Cl. Sci. Fis. Mat. Nat. Sez. II. Atti della Accademia Nazionale dei Lincei. Memorie. Classe di Scienze Fisiche, Matematiche e Naturali. Sezione II<sup>a</sup>. Geologia, Paleontologia e Mineralogia). (Rome)
- Atti Accad. Naz. Lincei Rend. Adunanze Gen. Atti della Accademia Nazionale dei Lincei. Rendiconti delle Adunanze Generali a Classi Riunite. (Rome) (Continued as: Atti Accad. Naz. Lincei Rend. Adunanze Solenni)
- Atti Accad. Naz. Lincei Rend. Adunanze Solenni. Atti della Accademia Nazionale dei Lincei. Rendiconti delle Adunanze Solenni. (Rome) (Formerly: Atti Accad. Naz. Lincei Rend. Adunanze Gen.)
- Atti Accad. Naz. Lincei Rend. Cl. Sci. Fie. Mat. Nat. Atti della Accademia Nazionale dei Lincei. Rendiconti. Classe di Scienze Fisiche, Matematiche e Naturali. (Rome)
- Atti Accad. Sci. Fis. Mat. Napoli. Atti dell'Accademia delle Scienze Fisiche e Maternatiche di Napoli. (Naples)
- Atti Accad. Sci. Ist. Bologna Cl. Sci. Fis. Mem. Atti della Accademia delle Scienze dell'Istituto di Bologna. Classe di Scienze Fisiche. Memorie. (Bologna)
- Atti Accad. Sci. Ist. Bologna Cl. Sci. Fis. Rend. Atti della Accademia delle Scienze dell'Istituto di Bologna. Classe di Scienze Fisiche. Rendiconti. (Bologna)
- Atti Accad. Sci. Lett. Arti Palermo Parte I. Atti della Accademia di Scienze Lettere e Arti di Palermo. Parte Prima: Scienze.
- Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Nat. Atti della Accademia delle Scienze di Torino. Classe di Scienze Fisiche, Matematiche e Naturali. (Turin)
- Atti Sem. Mat. Fis. Univ. Modena. Atti del Seminario Matematico e Fisico dell'Università di Modena. (Modena)
- Austral. J. Appl. Sci. Australian Journal of Applied Science.
  (Melbourne)
- Austral. J. Phys. Australian Journal of Physics. (Melbourne)
- Austral, J. Soi. The Australian Journal of Science. (Sydney)
- Austral. J. Statist. The Australian Journal of Statistics. (Sydney)

- lutomat. Remote Control. Automation and Remote Control. (A translation of Avtomatika i Telemehanika, a publication of the Academy of Sciences of the USSR). (Pittsburgh, Pa.) (Translation of Avtomat. i
- Auh. Norske Vid.-Akad. Oslo I. Avhandlinger Utgitt av det Norske Videnskaps-Akademi i Oslo. I. Mat.-Naturv. Klasse. (Oslo)
- Automat. i Telemeh. Akademija Nauk Sojuza SSR. Automatika i Telemehanika. (Moscow) (Translated as: Automat. Remote Control)
- Azerbaldžan. Gos. Univ. Učen. Zap. Ser. Fiz.-Mat. Him. Nauk. Azerbaldžanskii Gosudarstvennyi Universitet im. S. M. Kirova. Učenye Zapiski. Serija Fiziko-Matematičeskih i Himičeskih Nauk. (Baku)
- Bayer. Akad. Wiss. Math.-Nat. Kl. Abh. Bayerische Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Klasse. Abhandlungen. (Munich)
- Bayer. Akad. Wiss. Math.-Nat. Kl. S.-B. Bayerische Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Klasse. Sitzungsberichte. (Munich)
- Behavioral Soi. Behavioral Science. (Baltimore, Md.-Ann Arbor,
- Bell System Tech. J. The Bell System Technical Journal. (New York)
- Biochim. Biophys. Acta. Biochimica et Biophysica Acta. (Amsterdam)
- Biometrics. Biometrics. Journal of the Biometric Society. (Blacksburg, Va.)
- Biometrika. (London)

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- Bol. Fac. Ingen. Agrimens. Montevideo. Boletin de la Facultad de Ingenieria y Agrimensura de Montevideo. (Montevideo)
- Bol. Soc. Mat. Mexicana. Boletin de la Sociedad Matemática Mexicana. (Mexico, D.F.)
- Bol. Soc. Mat. São Paulo. Boletim da Sociedade de Matemática de São Paulo. (São Paulo)
- Bol. Univ. Paraná Fis. Teórica. Boletim da Universidade do Paraná. Conselho de Pesquisas. Instituto de Fisica. Física Teórica. (Curitiba)
- Boll. Un. Mat. Ital. Bolletino della Unione Matematica Italiana. (Bologna)
- Bonn. Math. Schr. Bonner Mathematische Schriften. (Bonn)
- British J. Philos. Sci. The British Journal for the Philosophy of Science. (Edinburgh)
- Bul. Inst. Politehn. București. Buletinul Institutului Politehnic București. (Bucharest)
- Bul. Inst. Politehn. Iași. Buletinul Institutului Politehnie din Iași. Serie Nouă. (Iași)
- Bul. Sti. Inst. Politchn. Cluj. Buletinul Științific al Institutului Politehnie din Cluj. (Cluj) (Formerly: Inst. Politehn. Cluj Lucrări
- Bülgar. Akad. Nauk. Izv. Mat. Inst. Bülgaraka Akademija na Naukite. Otdolonie za Fiziko-Matematičeski i Tehničeski Nauki. Izvestija na Matematičeskija Institut. (Sofia)
- Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys. Bulletin de l'Académie Polonaise des Sciences. Série des Sciences Mathé-matiques, Astronomiques et Physiques. (Warsaw)
- Bull. Acad. Serbe Sci. Cl. Sci. Math. Nat. Sci. Math. Bulletin de l'Académie Serbe des Sciences. Classe des Sciences Mathématiques et Naturelles Sciences. Mathématiques. (Belgrade)
- Bull. Amer. Math. Soc. Bulletin of the American Mathematical Society. (Providence, R.I.)
- Bull. Astronom. Bulletin Astronomique. (Paris)
- Bull. Astronom. Inst. Netherlands. Bulletin of the Astronomical Institutes of the Netherlands. (Haarlem)
- Bull. Calcutta Math. Soc. Bulletin of the Calcutta Mathematical Society. (Calcutta)
- Bull. Coll. Sci. (Baghdad). Bulletin of the College of Science. University of Baghdad. (Baghdad)

- Bull. Fukuoka Gakugei Univ. III. Bulletin of Fukuoka Gakugei University. III. Natural Sciences. (Fukuoka)
- Bull. Géodésique. Bulletin Géodésique. (Paris)
- Bull. Inst. Internat. Statist. Bulletin de l'Institut International de Statistique. (The Hague)
- Bull. (Izv.) Acad. Sci. USSR Geophys. Ser. Bulletin (Izvestiya) Academy of Sciences, USSR. Geophysics Series. (Washington, D.C.) (Translation of Izv. Akad. Nauk SSSR Ser. Geofiz.)
- Bull. JSME. Bulletin of JSME. (Japan Society of Mechanical Engineers). (Tokyo)
- Bull. Kyoto Gakugei Univ. Ser. B. Bulletin of the Kyoto Gakugei University. Ser. B. Mathematics and Natural Science. (Kyoto)
- Bull. Kyushu Inst. Tech. Math. Nat. Sci. Bulletin of the Kyushu Institute of Technology. Mathematics, Natural Science. (Tobata)
- Bull. Math. Biophys. The Bulletin of Mathematical Biophysics. (Chicago, Ill.)
- Bull. Math. Soc. Nanyang Univ. Singapore. Majallah Tahunan 'Ilmu Pasti. Bulletin of the Mathematical Society, Nanyang University, Singapore. (Singapore)
- Bull. Math. Soc. Sci. Math. Phys. R. P. Roumains. Bulletin Mathématique de la Société des Sciences Mathématiques et Physiques de la République Populaire Roumaine. (Bucharest)
- Bull, Math. Statist. Bulletin of Mathematical Statistics. (Fukuoka)
- Bull. Res. Council Israel Seci. F. Bulletin of the Research Council of Israel. Section F. Mathematics and Physics. (Jerusalem)
- Bull. Sci. Conseil Acad. RPF Yougoslav. Bulletin Scientifique. Conseil des Académies de la RPF de Yougoslavie. (Zagreb)
- Bull. Sci. Math. Bulletin des Sciences Mathématiques. (Paris)
- Bull. Signal. 1 Math. Pures Appl. Ministère de l'Éducation Nationale.
  Centre National de la Recherche Scientifique. Bulletin Signalétique.
  1. Mathématiques Pures et Appliquées. (Paris)
- Bull. Soc. Amis Sci. Lettres Poznań Sér. B. Bulletin de la Société des Amis des Sciences et des Lettres de Poznań. Série B: Sciences Mathématiques et Naturelles. (Poznań)
- Bull. Soc. Math. Belg. Bulletin de la Société Mathématique de Belgique.
- Bull. Soc. Math. France. Bulletin de la Société Mathématique de France. (Paris)
- Bull. Sec. Math. Grèce. Bulletin de la Société Mathématique de Grèce.
- Bull. Sec. Math. Phys. Macédoine. Bulletin de la Société des Mathématiciens et des Physiciens de la République Populaire de Macédoine. Bilten na Društvoto na Mathematičarite i Finičarite od Narodna Republika Makedonija. (Skopje)
- Bull. Soc. Math. Phys. Serbis. Bulletin de la Société des Mathé-maticiens et Physiciens de la R. P. de Serbis. Vestnik Društva Matematičara i Fizičara Narodne Republike Srbije. (Belgrade)
- Bull. Soc. Roy. Sci. Liège. Bulletin de la Société Royale des Sciences de Liège. (Liège)
- Bull. Soc. Sci. Lettres Lódź. Bulletin de la Société des Sciences et des Lettres de Lódź. (Lódź)
- Bull. Tech. Univ. Istanbul. (Istanbul) See Istanbul Tek. Univ. Bul.
- Bull. Tokyo Gakugei Univ. Bulletin of Tokyo Gakugei University. (Tokyo)
- Bull. Trimest. Inst. Actuaires Franç. Bulletin Trimestriel de l'Institut des Actuaires Français. (Paris)
- Bull. Univ. Osaka Prefecture Ser. A. Bulletin of University of Osaka Prefecture. Series A. Engineering and Natural Sciences. (Osaka)

- Bull. Utsunomiya Univ. Bulletin of Utsunomiya University. (Utsunomiya)
- C. R. Acad. Bulgare Sci. Doklady Bolgarskoï Akademii Nauk. Comptes Rendus de l'Académie Bulgare des Sciences. (Sofia)
- C. R. Acad. Sci. Paris. Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences. (Paris)
- Cahiers Centre Études Rech. Opér. Cahiers du Centre d'Études de Recherche Opérationnelle. (Brussels)
- Cahiers Centre Math. Statist. Appl. Sci. Social. Cahiers du Centre de Mathématique et de Statistique Appliquées aux Sciences Sociales de l'Institut de Sociologie Solvay. (Brussels)
- Cahiers de Phys. Cahiers de Physique. (Paris)
- Cahiers Rhodan. Cahiers Rhodaniens. (Lyon)
- Cale. Automat. y Cibernet. Calculo Automatico y Cibernetica. (Madrid)
- Calcutta Statist. Assoc. Bull. Calcutta Statistical Association Bulletin. (Calcutta)
- Canad. J. Math. Canadian Journal of Mathematics. Journal Canadien de Mathématiques. (Toronto)
- Canad. J. Phys. Canadian Journal of Physics. (Ottawa)
- Canad. Math. Bull. Canadian Mathematical Bulletin. Bulletin Canadien de Mathématiques. (Toronto)
- Časopis Pěst. Mat. Československá Akademie Věd. Časopis pro Pěstování Matematiky. (Prague)
- Centaurus. (Copenhagen)
- Chalmers Tekn. Högsk. Handl. Chalmers Tekniska Högskolans Handlingar. Transactions of Chalmers University of Technology, Gothenburg, Sweden. (Gothenburg)
- Chiffres. Chiffres. Revue de l'Association Française de Calcul. (Grenoble) (Continued as: Rev. Franç. Troitement Information Chiffres)
- Chinese Math. Chinese Mathematics. Translation of Acta Mathematica Sinica. (Providence, R.I.) (Translation of Acta Math. Sinica)
- Ciência (Lisboa). Ciência. Revista da Associação de Estudantes da Faculdade de Ciências de Lisboa. (Lisbon)
- Civiltà delle Macchine. Civiltà delle Macchine. (Rome)
- Collect. Math. Consejo Superior de Investigaciones Científicas. Universidad de Barcelona. Collectanes Mathematica. (Barcelona)
- Collog. Math. Colloquium Mathematicum. (Warsaw)
- Com. Acad. R. P. Romine. Comunicările Academiei Republicii Populare Romine. (Bucharest)
- Comm. ACM. Communications of the Association for Computing Machinery. (New York)
- Comm. and Electronics. Communication and Electronics. (New York)
- Comm. Dublin Inst. Adv. Studies Ser. A. Communications of the Dublin Institute for Advanced Studies. Series A. (Dublin)
- Comm. Fac. Sci. Univ. Ankara Sér. A. Communications de la Faculté des Sciences de l'Université d'Ankara. Série A. Mathématiques-Physique-Astronomie. (Ankara)
- Comm. Pure Appl. Math. Communications on Pure and Applied Mathematics. (New York)
- Comment. Math. Helv. Commentarii Mathematici Helvetici. (Zürich)
- Comment. Math. Univ. Carolinae. Commentationes Mathematics Universitatis Carolinae. (Prague)
- Comment. Math. Univ. St. Paul. Commentarii Mathematici Universitatis Saneti Pauli. Pikkyô Daigaku Sûgaku Zassi. (Tokyo)
- Compositio Math. Compositio Mathematica. (Groningen)
- Comput. Bull. The Computer Bulletin. (London)
- Comput. J. The Computer Journal. (London)

Comput. Rev. Computing Reviews. (New York) (Usually abbreviated OR in the text of Math. Reviews)

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- -Confer. Sem. Mat. Univ. Bari. Conference del Seminario di Matematica dell'Università di Bari. (Bari)
- CR. Computing Reviews. (New York)
- Oybernetica. Cybernetica. (Namur)
- Czechoslovak J. Phys. Čehoslovackaja Akademija Nauk. Čehoslovackii Fizičeskii Žurnal. Czechoslovak Academy of Sciences. Czechoslovak Journal of Physics. (Prague)
- Uzechoslovak Math. J. Čehoslovackaja Akademija Nauk. Čehoslovackii Matematičeskii Žurnal. Czechoslovak Mathematical Journal. (Prague)
- Deutsche Geodät. Kommiss. Bayer. Akad. Wiss. Reihe B Angew. Geodäsie. Deutsche Geodätische Kommission bei der Bayerischen Akademie der Wissenschaften. Reihe B. Angewandte Geodäsie. (Munich)
- Dialectica. (Neuchâtel)
- Discussions Faraday Soc. Discussions of the Faraday Society.
- Dokl. Akad. Nauk BSSR. Doklady Akademii Nauk BSSR. (Minak)
- Dokl. Akad. Nauk SSSR. Doklady Akademii Nauk SSSR. (Moscow) (Mathematics section translated as: Soviet Math. Dokl.; Physics section translated as: Soviet Physics Dokl.)
- Dokl. Akad. Nauk Tadžik. SSR. Doklady Akademii Nauk Tadžikskol SSR. (Dushanbe)
- Depovidi Akad. Nauk Ukrain. RSR. Dopovidi Akademii Nauk Ukrains'koi Radjans'koi Socialističnoi Respubliki. (Kiev)
- Duke Math. J. Duke Mathematical Journal. (Durham, N.C.)
- Econ. Proc. Roy. Dublin Soc. The Economic Proceedings of the Royal Dublin Society. (Dublin) (Continued as: Sci. Proc. Roy. Dublin Soc. Ser. B)
- Econometrica. Econometrica. Journal of the Econometric Society. (Chicago, Ill.)
- Edinburgh Math. Notes. The Edinburgh Mathematical Notes.
  (Edinburgh) (Continued as: Proc. Edinburgh Math. Soc. Edinburgh Math. Notes)
- Eesti NSV Tead. Akad. Toimetised Füüs.-Mat. Tehn. Tead. Seer.
  Eesti NSV Teaduste Akadeemia Toimetised. Füüsikalis-Matemaatiliste ja Tehniliste Teaduste Seeria. Izvestija Akademii Nauk.
  Estonskoi SSR. Serija Fiziko-Matematičeskih i Tehničeskih Nauk.
  (Tallin)
- Elektron. Datenverarbeitung. Elektronische Datenverarbeitung. Fachberichte über programmgesteuerte Maschinen und ihre Anwendung. (Braunschweig)
- Elem. Math. Elemente der Mathematik. Revue de Mathématiques Élémentaires. Rivista de Matematica Elementare. (Basel)
- English Abstracts Selected Articles Soviet Bloc and Mainland China Tech.

  J. Ser. I. English Abstracts of Selected Articles from Soviet Bloc and Mainland China Technical Journals. Series I—Physics and Mathematics. (Washington, D.C.)
- Enseignement Math. L'Enseignement Mathématique. (Geneva)
- Ericsson Technics. Ericsson Technics. (Stockholm)
- Estadist. Española. Estadistica Española. (Madrid)
- Estudistica. Estadística. (Washington, D.C.)
- Euclides (Groningen). Euclides. Tijdschrift voor de Didactiek der Exacte Vakken. (Groningen)
- Euclides (Modrid). Euclides. Revista Mensual de Ciencias Exactas, Físicas, Químicas, Naturales y Applicaciones Técnicas. (Madrid)
- Fac. Ingen. Agrimens. Montevideo Publ. Didact. Inst. Mat. Estadist.
  Facultad de Ingenieria y Agrimensura. Montevideo. Publicaciones
  Didacticas del Instituto de Matemática y Estadistica. (Montevideo)

- Fac. Ingen. Montevideo Publ. Inst. Mat. Estadist. Facultad de Ingenieria Montevideo. Publicaciones del Instituto de Matemática y Estadistica. (Montevideo) (Continued as: Univ. Repúb. Fac. Ingen. Agrimens. Montevideo Publ. Inst. Mat. Estadist.)

  Gruzin. Politehn. Inst. Trudy. (Tiflis)

  V. I. Lenina. Trudy. (Tiflis)

  Helv. Phys. Acta. Helvetica Physica Acta. Societatis Physicae
- Fac. Philos. Univ. Skopje Sect. Sci. Nat. Annuaire. Filozofski Fakultet na Univerzitetot-Skopje. Prirodno-Matematički Oddel. Faculté de Philosophie de l'Université de Skopje. Section des Sciences Naturelles. Annuaire. (Skopje) (Continued as: Fac. Sci. Univ.
- Fac. Sci. Univ. Skopje Annuaire. Faculté des Sciences de l'Université de Skopje. Annuaire. (Skopje) (Formerly: Fac. Philos. Univ. Skopje Sect. Sci. Nat. Annuaire)
- thonacci Quart. The Fibonacci Quarterly. Official Organ of The Fibonacci Association. A journal devoted to the study of integers with special properties. (St. Mary's College, Calif.)
- Fiz.-Mat. Spis. Bülgar. Akad. Nauk. Bülgarska Akademija na Naukite Fizičeski Institut. Matematičeski Institut. Fiziko-Mate-matičesko Spisanie. (Sofia)
- Piz. Twerd. Tela. Fizika Tverdogo Tela. (Moscow-Leningrad) (Translated as: Soviet Physics Solid State)
- Forsch. Gebiete Ingenieurwesens. Forschung auf dem Gebiete des Ingenieurwesens. (Berlin)
- Fortschr. Physik. Fortschritte der Physik. (Berlin)
- Fund. Appl. Aspects Math. Fundamental and Applied Aspects of Mathematics. (Monograph Series of the Research Institute of Applied Electricity). (Sapporo)
- Fund. Math. Polska Akademia Nauk. Fundamenta Mathematicae. (Warsaw)
- Funkcial. Ekvac. Fako de l'Funkcialaj Ekvacioj Japana Matematika Societo. Funkcialaj Ekvacioj. (Serio Internacia). (Kobe)
- Gac. Mat. (Madrid). Gaceta Matemática. (Madrid)
- Gapita. Ganita. (Lucknow)

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- Gaz. Mat. Fiz. Ser. A. Societatea de Științe Matematice și Fizice din R. P. R. Gazeta Matematică și Fizică. Publicație Pentru Studiul și Răspindirea Științelor Matematice și Fizice. Seria A. (Bucharest)
- Gaz. Mat. (Lisboa). Gazeta de Matemática. (Lisbon)
- Genet. Res. Genetical Research. (New York)
- Génie Civil. Génie Civil. (Paris)
- Geodaet, Inst. Medd. Geodaetisk Institut. Meddelelse. (Copenhagen)
- Geofys. Publ. Norske Vid.-Akad. Oslo. Geofysiske Publikasjoner Utgitt av det Norske Videnskaps-Akademi i Oslo. (Oslo)
- Giorn, Ist. Ital, Attuari. Giornale dell'Istituto Italiano degli Attuari. (Rome)
- Giorn. Mat. Battaglini. Giornale di Matematiche di Battaglini.
- Giorn, Mat. Finanz. Giornale di Matematica Finanziaria. Rivista Tecnica de Credito e della Previdenza. (Rome)
- Glas Srpske Akad. Nauka Od. Prirod.-Mat. Nauka. Glas Srpske Akademija Nauka. Odeljenje Prirodno-Matematičkih Nauka. (Belgrade) (Continued as: Acad. Serbs Sci. Arts Glas Cl. Sci. Math.
- Glasnik Mat.-Fiz. Astronom. Društvo Mat. Fiz. Hrvatske Ser. II. Glasnik Matematičko-Fizički i Astronomaki. Periodicum Matematico-Physicum et Astronomicum. Serija II. Društvo Matematičara i Fizičara Hrvatske. Societas Mathematicorum et Physicorum Croatiae. (Zagreb)
- Godišnik Sof. Univ. Piz.-Mat. Fakultet Kniga 1 Mat. (Sofia) See Annuaire Univ. Sofia Fac. Sci. Phys. Math. Livre 1 Math.

- Helv. Phys. Acta. Helvetica Physica Acta. Societatis Physicae Helveticae Commentaria Publica. (Basel)
- Hochfrequenztech. Elektroakust. Hochfrequenztechnik und Elektroakustik. (Leipzig)
- Houille Blanche. La Houille Blanche. Revue de l'Ingénieur Hydraulicien. (Grenoble)
- IBM J. Res. Develop. IBM Journal of Research and Development, (New York)
- Icarus. Icarus. International Journal of the Solar System. (New York)
- ICC Bull. ICC Bulletin. (Rome)
- IEEE Trans. Antennas and Propagation. IEEE Transactions on Antennas and Propagation. (New York) (Formerly: IRE Trans.)
- IEEE Trans. Automatic Control. IEEE Transactions on Automatic Control. (New York) (Formerly: IRE Trans.)
- IEEE Trans. Circuit Theory. IEEE Transactions on Circuit Theory. (New York) (Formerly: IRE Trans.)
- IEEE Trans. Communication Systems. IEEE Transactions on Communication Systems. (New York) (Formerly: IRE Trans.)
- IEEE Trans. Education. IEEE Transactions on Education. (New York) (Formerly: IRE Trans.)
- IEEE Trans. Electronic Computers. IEEE Transactions on Electronic Computers. (New York) (Formerly: IRE Trans.)
- IEEE Trans. Information Theory. IEEE Transactions on Information Theory. (New York) (Formerly: IRE Trans.)
- IEEE Trans. Nuclear Science. IEEE Transactions on Nuclear Science. (New York) (Formerly: IRE Trans.)
- IEEE Trans. Reliability. IEEE Transactions on Reliability. (New York) (Formerly: IRE Trans.)
- IEEE Trans. Space Electronics and Telemetry. IEEE Transactions on Space Electronics and Telemetry. (New York) (Formerly: IRE Trans.)
- Illinois J. Math. Illinois Journal of Mathematics. (Urbana, Ill.)
- Indag. Math. (Amsterdam) See Nederl. Akad. Wetensch. Indag. Math.
- Indian J. Math. Indian Journal of Mathematics. (Allahabad)
- Indian J. Phys. Indian Journal of Physics and Proceedings of the Indian Association for the Cultivation of Science. (Calcutta)
- Indian J. Theoret. Phys. Indian Journal of Theoretical Physics. (Calcutta)
- Indust. Math. Industrial Mathematics. (Detroit, Mich.)
- Information and Control. Information and Control. (New York)
- Information Storage and Retrieval. Information Storage and Retrieval. (Oxford-New York)
- Ing.-Arch. Ingenieur-Archiv. (Berlin-Göttingen-Heidelberg)
- Inst. Hautes Études Sci. Publ. Math. Institut des Hautes Études Scientifiques. Publications Mathématiques. (Paris)
- Inst. Politchn. Cluj Lucrdri Ști. Ministerul Învățămîntului și Culturii Institutul Politehnic Cluj. Lucrări Științifice. (Cluj) (Continued an: Bul. Sti. Inst. Politehn. Cluj)
- Internat. Abstracts Operations Res. International Abstracts in Operations Research. (Baltimore, Md.)
- Internat. J. Abstracts Statist. Theory Method. International Journal of Abstracts. Statistical Theory and Method. (London)
- Internat. J. Mech. Sci. International Journal of Mechanical Sciences. (Oxford)

- (Vienna)
- Internat. Sci. and Tech. International Science and Technology. (New York)
- Int.-Siroitel. Inst. Kuibyšev. Sb. Trudov. Moskovskii Ordena Trudovogo Krasnogo Znameni. Intenerno-Stroitel'nyi Institut im. V. V. Kulbyševa. Sbornik Trudov. (Moscow)
- Int. Z. Intenernyi Zurnal. Organ Otdelenija Tehničeskih Nauk i Instituta Mehaniki Akademii Nauk SSSR. (Moscow)
- IRE Trans. IRE Transactions. (New York) (Continued as: IEEE Trans.)
- Isis. Isis. An International Review Devoted to the History of Science and Civilization. (Cambridge, Mass.)
- Rend. A. Istituto Lombardo. Ist. Lombardo Accad. Sci. Lett. Accademia di Scienze e Lettere. Rendiconti. Scienze Matematiche, Fisiche, Chimiche e Geologiche. A. (Milan)
- Ist. Lombardo Sci. Lett. Rend. Parte Gen. e Atti Uff. Istituto Lombardo di Scienze e Lettere. Rendiconti. Parte Generale e Atti Ufficiali. (Milan)
- Ist. Veneto Sci. Lett. Arti Atti Cl. Sci. Mat. Nat. Istituto Veneto de Scienze, Lettere ed Arti. Venezia. Atti. Classo de Scienze Matematiche e Naturali. (Venice)
- Istanbul Tek. Univ. Bal. İstanbul Teknik Univeritesi Bülteni. Bulletin of the Technical University of Istanbul. (Istanbul) (Formerly: Bull. Tech. Univ. Istanbul)
- İstanbul Üniversitesi Fen Istanbul Univ. Fen Fak. Mec. Ser. A. Fakültesi Mecmussi. Seri A: Sirfî ve Tatbikî Matematik. Revue de la Faculté des Sciences de l'Université d'Istanbul. Série A: Mathématiques Pures et Appliquées. (Istanbul) (Formerly: Rev. Fac. Soi. Univ. Istanbul Sér. A)
- Istanbul Univ. Fen Fak. Mec. Ser. O. Istanbul Universitesi Fen Fakültesi Mecmussi. Seri C: Astronomi-Fizik-Kimya. Revue de la Faculté des Sciences de l'Université d'Istanbul. Série C: Astronomie-Physique-Chimie. (Istanbul) (Formerly: Rev. Fac. Sci. Univ. Istanbul Sér. (1)
- Istor.-Astronom. Issled. Istoriko-Astronomičeskie Issledovanija.
- Istor.-Mat. Issled. Istoriko-Matematičeskie Issledovanija. (Moscow-
- Izv. Akad. Nauk Armjan. SSR Ser. Fiz.-Mat. Nauk. Izvestija Akademii Nauk Armjanskoï SSR. Serija Fiziko-Matematičeskih Nauk. (Erevan)
- d. Nauk Armjan. SSR Ser. Tehn. Nauk. Izvestija Akademii Nauk Armjanskof SSR. Serija Tehničeskih Nauk. (Erevan)
- Inv. Akad. Nauk Azerbaldian. SSR. Ser. Fiz.-Mat. Tehn. Nauk. Izvestija Akademii Nauk Azerbaĭdžanskoï SSR. Serija Fiziko-Matematičeskih i Tehničeskih Nauk. (Baku)
- Isv. Akad. Nauk SSSR Ser. Fiz. Izvestija Akademii Nauk SSSR. Serija Fizičeskaja. (Moscow)
- Izv. Akad. Nauk SSSR Ser. Geofiz. Izvestija Akademii Nauk SSSR. Serija Geofizičeskaja. (Moscow) (Translated as: Bull. (Izv.) Acad. Sci. USSR Geophys. Ser.)
- Izv. Akad. Nauk SSSR Ser. Mat. Izveetija Akademii Nauk SSSR. Serija Matematičeskaja. (Moscow)
- Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk. Izvestija Akademii Nauk Turkmenskoï SSR. Serija Fiziko-Tehničeskih, Himičeskih i Geologičeskih Nauk. (Ashkhabad)
- Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk. Izvestija Akademii Nauk UzSSR. Serija Fiziko-Matematičeskih Nauk. UzSSR Fanlar Akademijasining Ahboroti. Fizika-Matematika Fanlari Serijasi.
- Isv. Bülgar. Akad. Nauk. Otd. Fiz.-Mat. Tehn. Nauk. Ser. Fiz. Izvestija na Bülgarskata Akademija na Naukite. Otdelenie za Fiziko-Matematičeski i Tehničeski Nauki. Serija Fizičeska. (Sofia)

- Internat. Math. Nachr. Internationale Mathematische Nachrichten. | Izv. Kazan. Fil. Akad. Nauk SSSR Ser. Fiz. Mat. i Tehn. Nauk. Izvestíja Kazanskogo Filiala Akademíí Nauk SSSR. Serija Fiziko-Matematičeskih i Tehničeskih Nauk. (Kazan)
  - Izv. Krymsk. Ped. Inst. Izvestija Krymskogo Pedagogičeskogo Instituta im. M. V. Frunze. (Simferopol)
  - Izv. Vysě. Učebn. Zaved. Matematika. Ministerstvo Vyslego Obrazovanija SSSR. Izvestija Vyskih Učebnyh Zavedenii. Matematika.
  - J. Acoust. Soc. Amer. The Journal of the Acoustical Society of America. (New York)
  - J. Aerospace Sci. Journal of the Aerospace Sciences. (New York) (Continued as: AIAA J.)
  - J. Amer. Statist. Assoc. Journal of the American Statistical Association. (Washington, D.C.)
  - J. Analyse Math. Journal d'Analyse Mathématique. (Jerusalem)
  - J. Annamalai Univ. Part B Sci. Journal of the Annamalai University. Part B. Sciences. (Annamalainagar)
  - J. Appl. Math. Mech. Journal of Applied Mathematics and Mechanics. (Translation of the Soviet journal Prikladnaja Matematika i Mehanika). (New York) (Translation of Prikl. Mat. Meh.)
  - J. Appl. Mech. Journal of Applied Mechanics. (New York) (Continued as: Trans. ASME Ser. E. J. Appl. Mech.)
  - J. Appl. Phys. Journal of Applied Physics. (New York)
  - J. Assec, Comput. Mach. Journal of the Association for Computing Machinery. (New York)
  - J. Austral. Math. Soc. The Journal of the Australian Mathematical Society. (Sydney)
  - J. Chem. Phys. The Journal of Chemical Physics. (New York)
  - J. College Arts Sci. Chiba Univ. Journal of the College of Arts and Sciences, Chiba University. (Chiba)
  - . Electronics Control. Journal of Electronics and Control. (London)
  - J. Fac. Sci. Hokkaido Univ. Ser. I. Journal of the Faculty of Science. Hokkaido University. Series I. Mathematics. (Sapporo)
  - J. Fac. Sci. Niigata Univ. Ser. I. Journal of the Faculty of Science. Niigata University. Series I. Mathematics, Physics and Chemistry. (Niigata)
  - J. Fac. Sci. Univ. Tokyo Sect. I. Journal of the Faculty of Science. University of Tokyo. Section I. Mathematics, Astronomy, Physics, Chemistry. (Tokyo)
  - J. Fluid Mech. Journal of Fluid Mechanics. (London)
  - J. Franklin Inst. Journal of the Franklin Institute. (Philadelphia.
  - J. Gakugei Tokushima Univ. Journal of the Gakugei College. Tokushima University. (Natural Science). (Tokushima)
  - J. Geophys. Res. Journal of Geophysical Research. (Washington,
  - J. Indian Inst. Sci. Journal of the Indian Institute of Science. (Bangalore)
  - J. Indian Math. Soc. The Journal of the Indian Mathematical Society.
  - J. Indian Soc. Agric. Statist. Journal of the Indian Society of Agricultural Statistics. (New Delhi)
  - J. Inst. Actuar. Journal of the Institute of Actuaries. (London)
  - J. Inst. Polytech. Osaka City Univ. Ser. A. Journal of the Institute of Polytechnics. Osaka City University. Series A. (Osaka) (Continued as: J. Math. Osaka City Univ.) Series A. Mathematics.
  - J. Karnatak Univ. Journal of the Karnatak University. (Dharwar)
  - J. London Math. Soc. The Journal of the London Mathematical Society. (London)

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- J. Math. Anal. Appl. Journal of Mathematical Analysis and Applica-tions. (New York)
- J. Math. and Phys. Journal of Mathematics and Physics. (Cambridge, Mass.)
- J. Math. Kyoto Univ. Journal of Mathematics of Kyoto University. (Kyoto) (Formerly: Mem. Coll. Sci. Univ. Kyoto Ser. A)
- J. Math. Mech. Journal of Mathematics and Mechanics. (Bloomington, Ind.)
- J. Math. Osaka City Univ. Journal of Mathematics. Osaka City University. (Osaka) (Formerly: J. Inst. Polytech. Osaka City Univ. Ser. A)
- J. Math. Pures Appl. Journal de Mathématiques Pures et Appliquées. (Paris)
- J. Math. Soc. Japan. Journal of the Mathematical Society of Japan. (Tokyo)
- J. Mathematical Phys. Journal of Mathematical Physics. (New York)
- J. Méc. Phys. Atmos. Journal de Mécanique et de Physique de l'Atmosphère. (Paris) (Formerly: J. Sci. Météorol.)
- J. Mécanique. Journal de Mécanique. (Paris)
- J. Mech. Phys. Solids. Journals of the Mechanics and Physics of Solids. (London)
- J. Nara Gakugei Univ. The Journal of Nara Gakugei University. (Nara)
- J. Nat. Sci. and Math. The Journal of Natural Sciences and Mathematics. (Lahore)
- J. Operations Res. Soc. Japan. Journal of the Operations Research Society of Japan. (Tokyo)
- J. Opt. Soc. Amer. Journal of the Optical Society of America. (New York)
- J. Osaka Inst. Sci. Tech. Part I. Journal of the Osaka Institute of Science and Technology. (Kinki University). Part I. Mathematics and Physics. (Osaka)
- J. Phys. Soc. Japan. Journal of the Physical Society of Japan.
- J. Proc. Roy. Soc. New South Wales. Journal and Proceedings of the Royal Society of New South Wales. (Sydney)
- J. Rech. Centre Nat. Rech. Sci. Journal des Recherches du Centre National de la Recherche Scientifique. (Paris)
- J. Reine Angew. Math. Journal f
  ür die reine und angewandte Mathematik. (Berlin)
- J. Res. Nat. Bur. Standards Sect. B. Journal of Research of the National Bureau of Standards. B. Mathematics and Mathematical Physics. (Washington, D.C.)
- J. Res. Nat. Bur. Standards Sect. D. Journal of Research of the National Bureau of Standards. D. Radio Propagation. (Washington, D.C.)
- J. Roy. Aero. Soc. The Journal of the Royal Aeronautical Society.
- J. Roy. Astronom. Soc. Canada. The Journal of the Royal Astronomical Society of Canada. (Toronto)
- J. Roy. Statist. Soc. Ser. A. Journal of the Royal Statistical Society. Series A. (General). (London)
- J. Roy. Statist. Soc. Ser. B. Journal of the Royal Statistical Society. Series B. (Methodological). (London)
- J. Sci. Engrg. Res. Journal of Science and Engineering Research. (Kharagpur)
- J. Sci. Hiroshima Univ. Ser. A. Journal of Science of the Hiroshima University. Series A (Mathematics, Physics, Chemistry). (Hiroshima) (Continued as: J. Sci. Hiroshima Univ. Ser. A-I\_Math.)

- J. Madras Univ. Sect. B. Journal of the Madras University. Section B. (Madras)

  J. Sci. Hiroshima Univ. Ser. A-I Math. Journal of Science of the Hiroshima University. Series A-I (Mathematics). (Hiroshima) (Formerly: J. Sci. Hiroshima Univ. Ser. A)
  - J. Sci. Météorol. Journal Scientifique de la Météorologie. (Paris) (Continued as: J. Méc. Phys. Atmos.)
  - J. Sci. Res. Banaras Hindu Univ. The Journal of Scientific Research of the Banaras Hindu University. (Banaras)
  - J. Sci. Res. Inst. Tokyo. Journal of the Scientific Research Institute. (Tokyo) (Continued as: Sci. Papers Inst. Phys. Chem. Res.)
  - J. SIAM Control Ser. A. Journal of the Society for Industrial and Applied Mathematics on Control. Series A. (Philadelphia, Pa.)
  - J. Soc. Indust. Appl. Math. Journal of the Society for Industrial and Applied Mathematics. (Philadelphia, Pa.)
  - J. Symbolic Logic. The Journal of Symbolic Logic. (New Brunswick, N.J.)
  - J. Univ. Bombay. Journal of the University of Bombay. (Bombay)
  - J. Washington Acad. Sci. Journal of the Washington Academy of Sciences. (Washington, D.C.)
  - J. Zosen Kiokai. Journal of Zosen Kiokai. (Tokyo)
  - deus. Janus. Revue Internationale de l'Histoire des Sciences, de la Médecine, de la Pharmacie et de la Technique. (Leiden)
  - Japan. J. Math. Science Council of Japan. Japanese Journal of Mathematics. (Tokyo)
  - Jber. Deutsch. Math.-Verein. Jahresbericht der Deutschen Mathematiker-Vereinigung. (Stuttgart)
  - Jugoslav. Akad. Znan. Umjet. Rasprave Odj. Mat. Fiz. Tehn. Nauke. Jugoslavenska Akademija Znanosti i Umjetnosti. Rasprave Odjela za Matematičke, Fizičke i Tehničke Nauke. (Zagreb)
  - Kiiv. Derf. Ped. Inst. Nauk. Zap. Ministerstvo Osviti URSR. Kiivs'kii Derfavnii Pedagogičnii Institut im. O. M. Gor'kogo. Naukovi Zapiski. (Kiev)
  - Kičinev. Gos. Univ. Učen. Zap. Komitet Vyslego i Srednego Special'-nogo Obrazovanija Soveta Ministrov Moldavskoi SSR. Kišinevskii Gosudarstvennyl Universitet. Učenye Zapiski. (Kishinev)
  - Ködai Math. Sem. Rep. Ködai Mathematical Seminar Reports. (Tokyo)
  - Köz. Mat. Lapok. Középiskolai Matematikai Lapok. (Budapest)
  - Kumamoto J. Sci. Ser. A. Kumamoto Journal of Science. Series A. (Mathematics, Physics and Chemistry). (Kumamoto)
  - Kungl. Fysiogr. Söllek. i Lund Förh. Kungl. Fysiografiska Sällekapets i Lund Förhandlingar. Proceedings of the Royal Physiographic Society at Lund. (Lund)
  - Kungl, Fysiogr. Sällsk. i Lund Handl. Acta Regine Societatis Physiographicae Lundensis. Kungl. Fysiografiska Sällskapets i Lund Handlingar. (Lund) (Same as: Lunds Univ. Arsskr. Avd. 2)
  - Kungl. Svenska Vetenskapsakad. Handl. Kungl. Svenska Vetenskapsakademiens Handlingar. (Stockholm)
  - Kungl. Tekn. Högek. Handl. Stockholm. Kungl. Tekniska Högskolans Handlingar. Transactions of the Royal Institute of Technology, Stockholm, Sweden. (Stockholm)
  - Kybernetik. Kybernetik. (Berlin)
  - Kyungpook Math. J. Kyungpook Mathematical Journal. (Taegu)
  - Latvijas PSR Zinātņu Akad. Vēstis. Latvijas PSR Zinātņu Akademijas Vēstis. Izvestija Akademii Nauk Letviiskol SSR. (Riga)
  - Latvijas Valsts Univ. Zinātn. Raksti. PSRS Augstākās Inglitības Ministrija. Pētera Stučkas Latvijas Valsts Universitate. Zināt-niskie Raksti. Ministerstvo Vysšego Obrazovanija. Latvilskii Gosudarstvennyi Universitet im. Petra Stučki. Učenye Zapiski.

- Leningrad. Gos. Univ. Učen. Zap. Ser. Mat. Nauk. Leningradskii Math.-Tech.-Wirtschaft. Mathematik-Technik-Wirtschaft. Zeitschrift Gosudarstvennyl Ordens Lenina Universitet im. A. A. Zdanova. Učenye Zapiski. Serija Matematičeskih Nauk. (Leningrad)
- wak. Mat. Sb. Vyskie Učebnye Zavedenija Litovskol SSR Litovskii Matematičeskii Sbornik. (Vilna)
- Logique et Analyse. Logique et Analyse. (Louvain)
- Lucrăr. Ști. Inst. Ped. Timișoara Mat.-Pis. Ministerul Invățămîn-tului și Culturii. Lucrările Științifice ale Institutului Pedagogic Timișoara. Matematică-Fixică. (Timișoara)
- Lundo Univ. Arsakr. Avd. 2. Acta Universitatis Lundensis. Lunds Universitets Arsakrift. Andra Avdelningen. (Lund) (Same as: Kungl. Fysiogr. Sällsk. i Lund. Handl.)
- L'vov. Politehn. Inst. Naučn. Zap. Ser. Fiz.-Mat. MVO USSR. L'vovskii Politehničeskii Institut. Naučnye Zapiski. Serija Fiziko-Matematičeskaja. (Lvov)
- Magyar Tud. Akad. Mat. Fiz. Oest. Kösl. A Magyar Tudományos Akadémia Matematikai és Fizikai Todományok Osztályának Közleményei. (Budapest)
- Magyar Tud. Akad. Mat. Kutató Int. Közl. A Magyar Tudományos Akadémia Matematikai Kutató Intézetének Közleményei. (Buda-
- Management Sci. Management Science. Journal of the Institute of Management Science. (Philadelphia, Pa.)
- Mat. Fys. Medd. Danske Vid. Selsk. Matematiskfysiske Meddelelser udgivet af Det Kongelige Danske Videnskabernes Selskab. (Copen-
- Mat.-Pys. Skr. Dansks Vid. Selsk. Matematiskfysiske Skrifter udgivet af Det Kongelige Danske Videnskabernes Selskab. (Copenhagen)
- Mat.-Fyz. Časopie Sloven. Akad. Vied. Matematicko-Fyzikálny Časopis. Slovenská Akadémia Vied. (Bratislava)
- Mat. Lapok. Matematikai Lapok. Bolyai János Matematikai Társulat. (Budapost)
- Mat. Sb. Matematičeskii Sbornik. Novaja Serija. (Moscow)
- Matematiche (Catania). Le Matematiche. (Catania)
- Math. Ann. Mathematische Annalen. (Berlin-Göttingen-Heidelberg)
- Math. Centrum Amsterdam Afd. Toegepaste Wisk. Mathematisch Centrum Amsterdam. Afd. Toegepaste Wiskunde. (Amsterdam)
- Math. Centrum Amsterdam Rap. Mathematisch Centrum Amsterdam. Rapport. (Amsterdam)
- Math. Centrum Amsterdam Rekenafdeling. Mathematisch Centrum Amsterdam. Rekenafdeling. (Amsterdam)
- Math. Comp. Mathematics of Computation. (Washington, D.C.) (Formerly: MTAC)
- Math. Gaz. The Mathematical Gazette. (London)
- Math. J. Okayama Univ. Mathematical Journal of Okayama University. (Okayama)
- Math. Japon. Mathematica Japonicae. (Kobe)
- Math. Mag. Mathematics Magazine. (Buffalo, N.Y.)
- Math. Nachr. Mathematische Nachrichten. (Berlin)
- Math. Naturwiss. Unterricht. Der mathematische und naturwissenschaftliche Unterricht. (Bonn)
- Math. Notae. Mathematicae Notae. Boletin del Instituto de Matemática. (Rosario)
- Semesterber. Mathematisch-Physikalische Semesterberichte. (Göttingen)
- Math. Reviews. Mathematical Reviews. (Providence, R.I.) (Usually abbreviated as MR in the text of Math. Reviews)
- Math. Scand. Mathematica Scandinavica. (Copenhagen)
- Math. Student. The Mathematics Student. (Madras)

- für moderne Rechentechnik und Automation. (Vienna)
- Math. Z. Mathematische Zeitschrift, (Berlin-Göttingen-Heidelberg)
- Mathematica (Cluj). Societatea de Stiințe Matematice și Fizice din R.P.R. Filials Cluj. Mathematica. (Cluj)
- Mathematika. Mathematika. A Journal of Pure and Applied Mathematics. (London)
- Mathesis. Mathesis. Recueil Mathématique à l'Usage des Écoles Spéciales et des Établissements d'Instruction Moyenne. (Mons)
- Matriz Tensor Quart. The Tensor Club of Great Britain. The Matrix and Tensor Quarterly. (London)
- Medd. Lunds Astronom. Obs. Ser. I. Meddelands från Lunds Astronomiska Observatorium. Series I. (Lund)
- Medd. Lunds Astronom. Obs. Ser. II. Meddelande från Lunds Astronomiska Observatorium. Series II. (Lund)
- Medd. Lunds Univ. Mat. Sem. Meddelanden från Lunds Universitets Matematiska Seminarium. Communications du Séminaire Mathématique de l'Université de Lund. (Lund)
- Mem. Acad. Ci. Madrid. Memorias de la Real Academia de Ciencias Exactas, Físicas y Naturales de Madrid. Serie de Ciencias Exactas.
- Mem. Amer. Math. Soc. Memoirs of the American Mathematical Society. (Providence, R.I.)
- Mem. Coll. Sci. Univ. Kyoto Ser. A. Memoirs of the College of Science. University of Kyoto. Series A. (Kyoto) (Continued as: J. Math. Kyoto Univ.)
- Mem. Coll. Sci. Univ. Kyoto Ser. A Math. Memoirs of the College of Science. University of Kyoto. Series A. Mathematics. (Kyoto)
- Mem. Defense Acad. Memoirs of the Defense Academy (Mathematics, Physics, Chemistry and Engineering) (Yokosuka)
- Mem. Fac. Ed. Kumamoto Univ. Memoirs of the Faculty of Education. Kumamoto University. (Kumamoto)
- Mem. Fac. Engrg. Hiroshima Univ. Memoirs of the Faculty of Engineering. Hiroshima University. (Hiroshima)
- Mem. Fac. Engrg. Miyazaki Univ. Memoirs of the Faculty of
- Engineering, Miyazaki University. (Miyazaki) Mem. Fac. Sci. Kyushu Univ. Ser. A. Memoirs of the Faculty of
- Science. Kyushu University. Seriec A. Mathematics. (Fukuoka)
- Mem. Ist. Lombardo Accad. Soi. Lett. Cl. Sci. Mat. Nat. Memorie dell'Istituto Lombardo. Accademia di Scienze e Lettere. Classe di Scienze Matematiche e Naturali. (Milan) (Formerly: Mem. 1st. Lombardo Cl. Sci. Mat. Nat.)
- Mem. Ist. Lombardo Cl. Sci. Mat. Nat. Memorie dell'Istituto Lombardo di Scienze e Lottere. Classe di Scienze Matematiche e Naturali. (Milan) (Continued as: Mem. Ist. Lombardo Accad. Sci. Lett. Cl. Sci. Mat. Nat.)
- Mem. Mat. Inst. "Jorge Juan". Consejo Superior de Investigaciones Científicas. Memorias de Matemática del Instituto "Jorge Juan". (Madrid)
- Mem. Osaka Univ. Lib. Arts Ed. Ser. B. Memoirs of the Osaka University of the Liberal Arts and Education. Series B. Natural Science. (Osaka)
- Mem. Proc. Manchester Lit. Philos. Soc. Memoirs and Proceedings of the Manchester Literary & Philosophical Society. (Manchester)
- Mem. Real Acad. Ci. Art. Barcelona. Memorias de la Real Academia de Ciencas y Artes de Barcelona. (Barcelona)
- Mem. Roy. Astronom. Soc. Memoirs of the Royal Astronomical Society. (London)
- Mem. School Sci. Engrg. Waseda Univ. Tokyo. Memoirs of the School of Science and Engineering. Waseda University, Tokyo. (Tokyo)
- Mem. Sec. Astronom. Ital. Memorie della Società Astronomica Italiana. (Milan)

- Mém. Soc. Roy. Sci. Liège Coll. in-8°. Mémoires de la Société Royale des Sciences de Liège. Collection in-8°. (Liège)
- Mémor. Sci. Math. Mémorial des Sciences Mathématiques. (Paris)
- Mémor. Sci. Phys. Mémorial des Sciences Physiques. (Paris)
- Météorol. La Météorologie. (Paris) (Formerly listed as: La Météorol.)
- Metrika. Metrika. (Würzburg)
- Metroecon. Metroeconomica. Rivista Internazionale di Economica. (Bologna)

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- Michigan Math. J. The Michigan Mathematical Journal. (Ann Arbor, Mich.)
- Min. Proc. Roy. Irish Acad. Minutes of Proceedings. Royal Irish Academy. (Dublin)
- Mind. Mind. A Quarterly Review of Psychology and Philosophy. (London)
- Mitt. Inst. Angew. Math. Zürich. Mitteilungen aus dem Institut für angewandte Mathematik an der Eidgenössischen Technischen Hochschule in Zürich. (Zürich)
- Mitt. Inst. Theoret. Phys. Geophys. Bergakad. Freiberg. Mitteilungen aus dem Institut für Theoretische Physik und Geophysik der Bergakademie Freiberg. (Freiberg)
- Mitt. Math. Ges. Hamburg. Mitteilungen der mathematischen Gesell-schaft in Hamburg. (Hamburg)
- Mitt. Math. Sem. Univ. Giessen. Mitteilungen des Mathematischen Seminars der Universität Giessen. (Giessen)
- Mitt. Max-Planck-Inst. Strömungsforsch. Mitteilungen aus dem Max-Planck-Institut für Strömungsforschung. (Göttingen)
- Mitt. Naturforsch. Ges. Bern. Mitteilungen der Naturforschenden Gesellschaft Bern. (Bern)
- Mitt. Verein. Schweiz. Versich.-Math. Mitteilungen der Vereinigung Schweizerischer Versicherungsmathematiker. Bulletin de l'Association des Actuaires Suisses. (Bern)
- Molecular Phys. Molecular Physics. (London)
- Monatsb. Deutsch. Akad. Wiss. Berlin. Monatsberichte der Deutschen Akademie der Wissenschaften zu Berlin. (Berlin)
- Monatsh, Math. Monatshefte für Mathematik. (Vienna)
- Monthly Notices Roy. Astronom. Soc. Monthly Notices of the Royal Astronomical Society. (London)
- Moskov. Gos. Univ. Soobič. Gos. Astronom. Inst. Šternberg. Moskovskii Gosudarstvennyi Universitet im. M. V. Lomonosova. Soobščenija Gosudarstvennogo Astronomičeskogo Instituta im. P. K. Šternberga.
- Moskov. Gos. Univ. Trudy Gos. Astronom. Inst. Šternberg. Moskovskii Gosudarstvennyl Universitet im. M. V. Lomonosova. Trudy Gosudarstvennogo Astronomičeskogo Instituta im. P. K. Šternberga. (Moscow)
- Moskov. Oblast. Ped. Inst. Učen. Zap. Moskovskii Oblastnoi Pedagogičeskii Institut. Učenya Zapiski. (Moscow)
- MR. Mathematical Reviews. (Providence, R.I.)
- MTAC. Mathematical Tables and Other Aids to Computation. (Washington, D.C.) (Continued as: Math. Comp.)
- Nachr. Akad. Wiss. Göttingen Math.-Phys. Kl. II. Nachrichten der Akademie der Wissenschaften in Göttingen. II. Mathematisch-Physikalische Klasse. (Göttingen)
- Nagoya Math. J. Nagoya Mathematical Journal. (Nagoya)
- Nat. Bur. Standards Appl. Math. Ser. National Bureau of Standards. Applied Mathematics Series. (Washington, D.C.)

- Mém. Soc. Roy. Soi. Liège Coll. in-4°. Mémoires de la Société Royale des Sciences de Liège. Collection in-4°. (Liège)

  Nat. Luchteaurtlab. Amsterdam Rep. National Luchtvaartlaboratorium. National Aeronautical Research Institute, Amsterdam.

  Report. (Amsterdam)
  - Nat. Sci. Rep. Lib. Arts Sci. Fac. Shizuoka Univ. Natural Science Reports of Liberal Arts and Science Faculty. Shizuoka University. (Shizuoka) (Continued as: Rep. Lib. Arts Sci. Fac. Shizuoka Univ. Sect. Nat. Sci.)
  - Nat. Sci. Rep. Ochanomizu Univ. Natural Science Report of the Ochanomizu University. (Tokyo)
  - Nature. Nature. (London)
  - Naturwissenschaften. Die Naturwissenschaften. (Berlin-Göttingen-Heidelberg)
  - Naval Res. Logist. Quart. Naval Research Logistics Quarterly. (Washington, D.C.)
  - Navigation. Navigation. Journal of the Institute of Navigation. (Los Angeles, Calif.)
  - Nederl. Akad. Wetensch. Indag. Math. Koninklijke Nederlandse Akademie van Wetenschappen. Indagationes Mathematicae ex Actis Quibus Titulus. Proceedings of the Section of Sciences. (Amsterdam) (Same as: Nederl. Akad. Wetensch. Proc. Ser. A)
  - Nederl. Akad. Wetensch. Proc. Ser. A. Koninklijke Nederlandse Akademie van Wetenschappen. Proceedings. Series A. Mathematical Sciences. (Amsterdam) (Same as: Nederl. Akad. Wetensch. Indag. Math.)
  - Nederl. Akad. Wetensch. Proc. Ser. B. Koninklijke Nederlandse Akademie van Wetenschappen. Proceedings. Series B. Physical Sciences. (Amsterdam)
  - Nederl. Akad. Wetensch. Verslag Afd. Natuurk. Koninklijke Nederlandse Akademie van Wetenschappen. Verslag van de Gewone Vergadering van de Afdeeling Natuurkunde. (Amsterdam) (Formerly: Nederl. Akad. Wetensch. Verslagen Afd. Natuurk.)
  - Nederl. Akad. Wetensch. Verslagen Afd. Natuurk. Koninklijke Nederlandse Akademie van Wetenschappen. Verslagen van de Gewone Vergaderingen der Afdeeling Natuurkunde. (Amsterdam) (Continued as: Nederl. Akad. Wetensch. Verelag Afd. Natuurk.)
  - Nederl. Tijdschr. Natuurk. Nederlands Tijdschrift voor Natuurkunde. (Utrecht)
  - New Zealand J. Sci. New Zealand Journal of Science. (Wellington) (Formerly: New Zealand J. Sci. Tech. Sect. B)
  - New Zealand J. Sci. Tech. Sect. B. New Zealand Journal of Science and Technology. B. General Research Section. (Wellington) (Continued as: New Zealand J. Sci.)
  - Nieuw Arch. Wisk. Nieuw Archief voor Wiskunde. (Groningen)
  - Nieuw Tijdschr. Wisk. Nieuw Tijdschrift voor Wiskunde. (Groninggen-Djakarta)
  - Nordisk Mat. Tidekr. Nordisk Matematisk Tidekrift. (Oslo)
  - Norsks Vid. Selsk. Forh. (Trondheim). Det Kongelige Norske Videnskabers Selskabs Forhandlinger. (Trondheim)
  - Norske Vid. Selsk. Skr. (Trondheim). Det Kongelige Norske Videnskabers Selskabs Skrifter. (Trondheim)
  - Notas Mat. Notas de Matemática. (Rio de Janeiro)
  - Notre Dame J. Formal Logic. Notre Dame Journal of Formal Logic. (Notre Dame, Ind.)
  - Nova Acta Soc. Sci. Upsal. Nova Acta Regiae Societatis Scientiarum Upsaliensis. (Uppsala)
  - Nuclear Phys. Nuclear Physics. (Amsterdam)
  - Nuclear Soi. Abstracts. Nuclear Science Abstracts. (Oak Ridge, Tenn.)
  - Nucleus. Nucleus. La Revue Scientifique à l'Âge Atomique. (Paris) (Formerly: Rev. Sci.)
  - Numer. Math. Numerische Mathematik. (Berlin-Göttingen-Heidelberg)

- Nuovo Cimento, Il Nuovo Cimento, (Bolorna)
- O.N.E.R.A. Publ. Office National d'Études et de Recherches Aéronautiques. Publication. (Paris)
- Observatory. The Observatory. A Review of Astronomy. (Hailsham)
- Onde Elec. L'Onde Électrique. (Paris)
- Operations Res. Operations Research. The Journal of the Operations Research Society of America. (Baltimore, Md.) (Sometimes abbreviated as OR in Math. Reviews)
- Optica Acta. Optica Acta. (London)
- Optik. Optik. Zeitschrift für das gesamte Gebiet der Licht- und Elektronenoptik. (Stuttgart)
- Optika i Spektrosk. Akademija Nauk SSSR. Optika i Spektroskopija. (Moscow-Leningrad) (Translated as: Optics and Spectrosc.)
- Osaka Math. J. Osaka Mathematical Journal. (Osaka)
- Osterreich. Akad. Wiss. Math.-Nat. Kl. S.-B. II. Osterreichische Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Klasse. Sitzungsberichte. Abteilung II. Mathematik, Astronomie, Physik, Meteorologie und Technik. (Vienna)
- Österreich. Ing.-Arch. Österreichisches Ingenieur-Archiv. (Vienna)
- Österreich. Ing. Z. Österreichische Ingenieur Zeitschrift. Zeitschrift des Österreichischen Ingenieur- und Architekten-Vereins. (Vienna)
- Pacific J. Math. Pacific Journal of Mathematica. (Berkeley, Calif.)
- Period. Mat. Periodico di Matematiche. (Bologna)
- Perm. Gos. Univ. Učen. Zap. Mat. Ministerstvo Vysšego i Srednego Special nogo Obrazovanija RSFSR. Permskii Gosudarstvennyi Universitet im. A. M. Gor'kogo. Učenye Zapiski. Matematika. (Perm)
- Philos. Mag. The Philosophical Magazine. A Journal of Theoretical, Experimental and Applied Science. (London)
- Philos. Rev. The Philosophical Review. (Ithaca, N.Y.)
- Philos. Sci. Philosophy of Science. (Baltimore, Md.)
- Philos. Trans. Rey. Soc. London Ser. A. Philosophical Transactions of the Royal Society of London. Series A. Mathematical and Physical Sciences. (London)
- Phys. Fluids. The Physics of Fluids. (New York)
- Phys. Lett. Physics Letters. (Amsterdam)
- Phys. Norveg. Physica Norvegica. (Oalo)
- Phys. Rev. The Physical Review. (New York)
- Phys. Rev. Lett. Physical Review Letters. (New York)
- Physica. (Amsterdam)
- Polska Biblio. Analit. Mech. Polska Akademia Nauk. Instytut Podstawowych Problemów Techniki. Polska Bibliografia Analityczna. Mechanika. Polish Scientifio Abstracts. Mechanics. (Warsaw)
- Portugal, Math. Portugaliae Mathematica. (Lisbon)
- Portugal. Phys. Portugaliae Physica. (Lisbon)
- Práce Brn. Českoslov. Akad. Věd. Práce Brněnské Základny Českoalovenské Akademie Věd. Acta Academiae Scientiarum Čechoalovenicae Basis Brunensis. (Brno)
- Proce Mat. Roczniki Polskiego Towarzystwa Matematycznego. Seria I. Prace Matematyczne. (Warsaw)
- Prakt. Akad. Athēnon. Πρακτικά τῆς 'Ακαδημίας 'Αθηνων. (Athens)
- Prikl. Mat. Meh. Akademija Nauk SSSR. Otdelenie Tehničeskih Nauk. Institut Mehaniki. Prikladnaja Matematika i Mehanika. (Moscow) (Translated as: J. Appl. Math. Mech.)
- Prikladna Meh. Akademija Nauk Ukrains'kol RSR. Institut Mehaniki. Prikladna Mehanika. (Kiev) (Formerly listed as: Akad. Nauk Ukrain. RSR Prikl. Meh.)

- Problemy Kibernet, Problemy Kibernetiki. (Moscow)
- Problemy Peredači Informacii. Akademija Nauk SSSR. Laboratorija Sistem Peredači Informacii. Problemy Peredači Informacii. (Moscow)
- Proc. Amer. Math. Soc. Proceedings of the American Mathematical Society. (Providence, R.I.)
- Proc. Amer. Philos. Soc. Proceedings of the American Philosophical Society Held at Philadelphia for Promoting Useful Knowledge. (Philadelphia, Pa.)
- Proc. Cambridge Philos. Soc. Proceedings of the Cambridge Philosophical Society. (Cambridge, England)
- Proc. Edinburgh Math. Soc. Proceedings of the Edinburgh Mathematical Society. (Edinburgh)
- Proc. Edinburgh Math. Soc. Edinburgh Math. Notes. Proceedings of the Edinburgh Mathematical Society. Edinburgh Mathematical Notes. (Edinburgh) (Formerly: Edinburgh Math. Notes)
- Proc. Egyptian Acad. Sci. Proceedings of the Egyptian Academy of Sciences. (Cairo)
- Proc. Fac. Engrg. Keio Univ. Proceedings of the Fujihara Memorial Faculty of Engineering. Keio University. (Tokyo)
- Proc. Glasgow Math. Assoc. Proceedings of the Glasgow Mathematical Association. (Glasgow)
- Proc. IEEE. Proceedings of the IEEE. (New York) (Formerly: Proc. IRE)
- Proc. Indian Acad. Sci. Sect. A. Proceedings of the Indian Academy of Sciences. Section A. (Bangalore)
- Proc. Indian Acad. Sci. Sect. B. Proceedings of the Indian Academy of Sciences. Section B. (Bangalore)
- Proc. Indiana Acad. Sci. Proceedings of the Indiana Academy of Science. (Indianapolis, Ind.)
- Proc. Inst. Elec. Engrs. A. The Proceedings of the Institution of Electrical Engineers. Part A. Power Engineering. (London)
- Proc. Inst. Elec. Engrs. B. The Proceedings of the Institution of Electrical Engineers. Part B. Radio and Electronic Engineering (including Communication Engineering). (London)
- Proc. Inst. Elec. Engrs. C. The Proceedings of the Institution of Electrical Engineers. Part C. Monographs. (London)
- Proc. Inst. Mech. Engrs. Proceedings of the Institution of Mechanical Engineers. (London)
- Proc. Inst. Statist. Math. The Proceedings of the Institute of Statistical Mathematics. (Tokyo)
- Proc. Iowa Acad. Sci. Proceedings of the Iowa Academy of Science.
  (Des Moines, Iowa)
- Proc. Iraqi Sci. Soc. Proceedings of the Iraqi Scientific Societies. (Baghdad)
- Proc. IRE. Proceedings of the IRE. A Journal of Communications and Electronic Engineering. (New York) (Continued as: Proc. IEEE)
- Proc. Japan Acad. Proceedings of the Japan Academy. (Tokyo)
- Proc. London Math. Soc. Proceedings of the Lendon Mathematical Society. (London)
- Proc. Math. Phys. Soc. Egypt. Proceedings of the Mathematical and Physical Society of Egypt. (Cairo) (Continued as: Proc. Math. Phys. Soc. U.A.R.)
- Proc. Math. Phys. Soc. U.A.R. Proceedings of the Mathematical and Physical Society of U.A.R. (Cairo) (Formerly: Proc. Math. Phys. Soc. Egypt)

- Proc. Nat. Acad. Sci. U.S.A. Proceedings of the National Academy of Sciences of the United States of America. (Washington, D.C.)
- Proc. Nat. Inst. Sci. India Part A. Proceedings of the National Institute of Sciences of India. Part A. Physical Sciences. (New Delhi)
- Proc. Pakistan Statist. Assoc. Proceedings of the Pakistan Statistical Association. (Lahore)
- Proc. Phys. Soc. Proceedings of the Physical Society. (London)

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- Proc. Roy. Irish Acad. Sect. A. Proceedings of the Royal Irish Academy, Section A. (Dublin)
- Proc. Roy. Soc. Edinburgh Sect. A. Proceedings of the Royal Society of Edinburgh. Section A. (Mathematical and Physical Sciences). (Edinburgh)
- Proc. Roy. Soc. London Ser. A. Proceedings of the Royal Society of London. Series A. Mathematical and Physical Sciences. (London) (Continued as: Proc. Roy. Soc. Ser. A)
- Proc. Roy. Soc. Ser. A. Proceedings of the Royal Society. Series A. Mathematical and Physical Sciences. (London) (Formerly: Proc. Roy. Soc. London Ser. A)
- Proc. Vibration Problems. Polish Academy of Sciences. Institute of Basic Technical Problems. Proceedings of Vibration Problems. (Warsaw)
- Progr. Theoret. Phys. Progress of Theoretical Physics. (Kyoto)
- Psychometrika. Psychometrika. A Journal Devoted to the Development of Psychology as a Quantitative Rational Science. (Chapel Hill, N.C.)
- Publ. Astronom. Soc. Pacific. Publications of the Astronomical Society of the Pacific. (San Francisco, Calif.)
- Publ. Fac. Sci. Univ. Masaryk. Spisy Vydávané Přirodovědeckou Fakultou Masarykovy University. Trudy Estestvenno-Istoričeskogo Fakultota Universiteta im. T. G. Masarika. Publications de la Faculté des Sciences de l'Université Masaryk. (Brno) (Continued as: Spisy Přirod. Fak. Univ. Brno)
- Publ. Inst. Math. (Beograd). Institut Mathématique. Publications de l'Institut Mathématique. Nouvelle Série. (Belgrade) (Formerly: Acad. Serbe Sci. Publ. Inst. Math.)
- Publ. Inst. Statist. Univ. Paris. Publications de l'Institut de Statistique de l'Université de Paris. (Paris)
- Publ. Math. Debrecen. Publicationes Mathematicae. (Debrecen)
- Publ. Sci. Tech. Ministère de l'Air (Paris). Publications Scientifiques et Techniques du Ministère de l'Air. (Paris)
- Publ. Sci. Tech. Ministère de l'Air (Paris) Notes Tech. Publications Scientifiques et Techniques du Ministère de l'Air. Notes Techniques. (Paris)
- Publ. Sci. Univ. Alger Sér. A. Publications Scientifiques de l'Université d'Alger. Série A. Sciences Mathématiques. (Algiers)
- Publ. Sém. Géom. Univ. Neuchâtel. Publications du Séminaire de Géométrie de l'Université de Neuchâtel. (Neuchâtel)
- Quart. Appl. Math. Quarterly of Applied Mathematics. (Providence, R.I.)
- Quart. J. Math. Oxford Ser. The Quarterly Journal of Mathematics, Oxford Second Series. (Oxford)
- Quart. J. Mech. Appl. Math. The Quarterly Journal of Mechanics and Applied Mathematics. (Oxford)
- Quart. J. Roy. Astronom. Soc. The Quarterly Journal of the Royal Astronomical Society. (London)
- Quart. Rev. Sci. Publ. Polish Academy of Sciences. Distribution Centre for Scientific Publications. Quarterly Review of Scientific Publications. (Warsaw)
- RAAG Newsletter. RAAG Newsletter. (Tokyo)
- RAAG Res. Notes. RAAG Research Notes. (Tokyo)

- Rad Jugoslav. Akad. Znan. Umjet. Odjel Mat. Fiz. Tehn. Nauke. Rad Jugoslavenske Akademije Znanosti i Umjetnosti. Odjel za Matematičke, Fizičke i Tehničke Nauke. (Zagreb)
- Radio Engrg. and Electronics. Radio Engineering and Electronics. (Translation of Radiotehnika i Elektronika, a U.S.S.R. Academy of Sciences Publication). (New York) (Translation of Radiotehn. i Elektron.)
- Radiotehn. i Élektron. Akademija Nauk SSSR. Radiotehnika i Élektronika. (Moscow) (Translated as: Radio Engry. and Electronics)
- Rasprostr. Radiovoln i Ionosferu. Akademija Nauk SSSR. Trudy Instituta Zeminogo Magnetizma, Ionosfery i Rasprostranenija Radiovoln. Rasprostranenie Radiovoln i Ionosfera. (Moscow)
- RCA Rev. RCA Review. (New York)
- Rech. Aére. La Recherche Aéronautique. (Paris)
- Rend. Accad. Naz. dei XL. Rendiconti, Accademia Nazionale dei XL. (Rome)
- Rend. Accad. Sci. Fis. Mat. Napoli. Società Nazionale di Napoli. Rendiconto dell'Accademia delle Scienze Fisiche e Matematiche. (Naples)
- Rend. Circ, Mat. Palermo. Rendiconti del Circolo Matematico di Palermo. (Palermo)
- Rend. Mat. e Appl. Università di Roma. Istituto Nazionale di Alta Matematica. Rendiconti di Matematica e delle sue Applicazioni. (Rome)
- Rend. Sem. Fac. Sci. Univ. Cagliari. Rendiconti del Seminario della Facoltà di Scienze della Università di Cagliari. (Cagliari)
- Rend. Sem. Mat. Fis. Milano. Rendiconti del Seminario Matematico e Fisico di Milano. (Milan)
- Rend. Sem. Mat. Univ. Padova. Rendiconti del Seminario Matematico dell'Università di Padova. (Padova)
- Rep. Inst. Sci. Tech. Univ. Tokyo. The Reports of the Institute of Science and Technology, University of Tokyo. (Tokyo)
- Rep. Lib. Arts Sci. Fac. Shizuoka Univ. Sect. Nat. Sci. Reports of Liberal Arts and Science Faculty. Shizuoka University. Section Natural Science. (Shizuoka) (Formerly: Nat. Sci. Rep. Lib. Arts Sci. Fac. Shizuoka Univ.)
- Rep. Res. Inst. Appl. Mech. Kyushu Univ. Reports of Research Institute for Applied Mechanics. Kyushu University. (Fukuoka)
- Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs. Reports of Statistical Application Research, Union of Japanese Scientists and Engineers. (Tokyo)
- Repúb. Venezuela Bol. Acad. Ci. Fis. Mat. Nat. República de Venezuela. Boletin de la Academia de Ciencias Físicas, Matemáticas y Naturales. (Caracas)
- Res. Bull. Panjab Univ. Research Bulletin of the Panjab University. (Hoshiarpur)
- Res. Rep. Nagaoka Tech. College. Research Reports of the Nagaoka Technical College. (Nagaoka)
- Rev. Acad, Ci. Madrid. Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales de Madrid. (Madrid)
- Rev. Acad. Ci. Zaragoza. Revista de la Academia de Ciencias Exactas, Fisico-Químicas y Naturales de Zaragoza. (Zaragoza)
- Rev. Acad. Colombiana Ci. Exact. Fis. Nat. Revista de la Academia Colombiana de Ciencias Exactas, Físicas y Naturales. (Bogotá)
- Rev. Ci. (Lima). Revista de Ciencias. (Lima)
- Rev. Fac. Ci. Univ. Coimbra. Revista de Faculdade de Ciências da Universidade de Coimbra. (Coimbra)
- Rev. Fac. Sci. Univ. Istanbul Sér. A. (Istanbul) See Istanbul Univ. Fen. Fak. Mec. Ser. A.
- Rev. Fac. Sci. Univ. Istanbul Sér. C. (Istanbul) See Istanbul Univ. Fen. Fak. Mec. Ser. C.

- Rev. Franç. Traitement Information Chiffres. Revue Française de Traitement de l'Information. Chiffres. (Paris) (Formerly: Chiffres)
- Rev. Gén. Sci. Pures Appl. Revue Générale des Sciences Pures et. Appliquées et Bulletin de l'Association Française pour l'Avancement des Sciences. (Paris)
- Rev. Histoire Sci. Appl. Revue d'Histoire des Sciences et de leurs Applications. (Paris)
- Rev. Inst. Internat. Statist. Revue de l'Institut International de Statistique. Review of the International Statistical Institute. (The Hague)
- Rev. Mat. Cuyana. Universidad Nacional de Cuyo. Facultad de Ciencias. Revista Matemática Cuyana. (San Luis)
- Rev. Mat. Elem. Revista de Matemáticas Elementales. (Bogotá)
- Rev. Moi. Hisp.-Amer. Revista Matemática Hispano-Americana. (Madrid)
- Rev. Math. Pures Appl. Académie de la République Populaire Roumaine. Revue de Mathématiques Pures et Appliquées. (Bucharest)
- Rev. Math. Spécial. Revue de Mathématiques Spéciales. (Paris)
- Rev. Méc. Appl. Académie de la République Populaire Roumaine Revue de Mécanique Appliquée. (Bucharest)
- Rev. Mezicana Fis. Revista Mexicana de Fisica. (Mexico, D.F.)
- Rev. Modern Phys. Reviews of Modern Physics. (New York)
- Rev. Optique. Revue d'Optique Théorique et Instrumentale. (Paris)
- Rev. Sci. La Revue Scientifique. Revue Trimestrielle Illustrée. (Paris) (Continued as : Nucleus)
- Rev. Un. Mat. Argentina. Revista de la Unión Matemática Argentina.
  (Buenos Aires)
- Rice Univ. Studies. Rice University Studies. (Houston, Tex.)
- Ricerca (Napoli). La Ricerca. Rivista di Matematiche Pure ed Applicate. (Naples)
- Ricerche Mat. Ricerche di Matematica. (Naples)
- Riv. Mat. Univ. Parma. Rivista di Matematica della Università di Parma. (Parma)
- Rjazansk. Gos. Ped. Inst. Učen. Zap. Rjazanskii Gosudarstvennyi Pedagogičeskii Institut. Učenye Zapiski. (Ryazan)
- Rostov.-na-Donu Gos. Ped. Inst. Fiz.-Mat. Fak. Učen. Zap. Rostovakiina-Donu Gosudarstvennyi Pedagogičeskii Institut. Fiziko-Matematičeskii Fakul'tet. Učenye Zapiski. (Rostov-on-Don)
- Rozpravy Československé Akad. Včd. Rozpravy Československé Akademie Včd. (Prague)
- Rosprawy Int. Polska Akademia Nauk. Instytut Podstawowych Problemów Techniki. Rosprawy Inżynierskie. (Warsaw)
- Rozprawy Mat. Polska Akademia Nauk. Instytut Matematyczny. Rozprawy Matematyczne. (Warsaw)
- Russian Math. Surveys. Russian Mathematical Surveys. (A translation of the survey articles and of selected biographical articles in Uspehi Matematičeskih Nauk). (London) (Translation of Uspehi Mat. Nauk)
- RŽ Astronom. Geod. Akademija Nauk SSSR. Institut Naučnoï Informacii. Referativnyi Žurnal. Astronomija Geodezija Referaty. (Moscow)
- RŽMat. Akademija Nauk SSSR. Institut Naučnol Informacii. Referativnyl Žurnal. Matematika Referaty. (Moscow)
- RŽMeh. Akademija Nauk SSSR. Institut Naučnol Informacii. Referativnyl Žurnal. Mehanika Referaty. (Moscow)
- SA. Science Abstracts. Section A. Physics Abstracts. (London)
- Sankhyā. Sankhyā. The Indian Journal of Statistics. (Calcutta) (Continued as: Sankhyā Ser. A and Sankhyā Ser. B)

Sankhyā Ser. A. Sankhyā. The Indian Journal of Statistics. Series A. (Calcutta) (Formerly: Sankhyā)

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- Sankhyā Ser. B. Sankhyā. The Indian Journal of Statistics. Series B. (Calcutta) (Formerly: Sankhyā)
- S.-B. Berlin. Math. Ges. Sitzungsberichte der Berliner Mathematischen Gesellschaft. (Berlin)
- S.-B. Deutsch. Akad. Wiss. Berlin Kl. Math. Phys. Tech. Sitzungsberichte der Deutschen Akademie der Wissenschaften zu Berlin. Klasse für Mathematik, Physik und Technik. (Berlin)
- S.-B. Finn. Akad. Wiss. Sitzungsberichte der Finnischen Akademie der Wissenschaften. Proceedings of the Finnish Academy of Science and Letters. (Helsinki)
- S.-B. Heidelberger Akad. Wiss. Math.-Nat. Kl. Sitzungsberichte der Heidelberger Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Klasse. (Heidelberg)
- S.-B. Phys.-Med. Soz. Erlangen. Sitzungsberichte der physikalischmedizinischen Sozietät zu Erlangen. (Erlangen)
- Sb. Vysoké. Učení Tech. Brno. Sborník Vysokého Učení Technického v Brno. (Brno)
- Schr. Math. Inst. Univ. Münster. Schriftenreihe des Mathematischen Instituts der Universität Münster. (Münster)
- Schweiz. Z. Vermessg. Kulturtech. Photogr. Schweizerische Zeitschrift für Vermessung, Kulturtechnik und Photogrammetrie. Revue Technique Suisse des Mensurations, du Génie Rural et de Photogrammétrie. (Winterthur)
- Schweiz, Z. Volkswirtschaft Statist. Schweizerische Zeitschrift für Volkswirtschaft und Statistik. Revus Suisse d'Economie Politique et de Statistique. (Basel)
- Sci. Abstracts Sect. A. Science Abstracts, Section A. Physics Abstracts. (London) (Usually abbreviated SA in the text of Math. Reviews)
- Sci. Abstracts Sect. B. Science Abstracts. Section B. Electrical Engineering Abstracts. (London)
- Sci. Amer. Scientific American. (New York)
- Sci. Information Notes. Scientific Information Notes. (Washington, D.C.)
- Sci. Monthly. The Scientific Monthly. (Washington, D.C.)
- Sci. Papers Coll. Gen. Ed. Univ. Tokyo. Scientific Papers of the College of General Education. University of Tokyo. (Tokyo) See Sci. Papers College Gen. Ed. Univ. Tokyo.
- Sci. Papers College Gen. Ed. Univ. Tokyo. Scientific Papers of the College of General Education. University of Tokyo. (Tokyo) (Formerly listed as: Sci. Papers Coll. Gen. Ed. Univ. Tokyo)
- Sci. Papers Inst. Phys. Chem. Res. Scientific Papers of the Institute of Physical and Chemical Research. (Tokyo) (Formerly: J. Sci. Res. Inst. Tokyo)
- Sci. Proc. Roy. Dublin Soc. The Scientific Proceedings of the Royal Dublin Society. (Dublin) (Continued as: Sci. Proc. Roy. Dublin Soc. Ser. A)
- Sci. Prec. Roy. Dublin Soc. Ser. A. The Scientific Proceedings of the Royal Dublin Society. Series A. (Dublin) (Formerly: Sci. Prec. Roy. Dublin Soc.)
- Sci. Proc. Roy. Dublin Soc. Ser. B. The Scientific Proceedings of the Royal Dublin Society. Series B. (Dublin) (Formerly: Econ. Proc. Roy. Dublin Soc.)
- Sci. Rep. Kagoshima Univ. Science Reports of the Kagoshima University. (Kagoshima)
- Sci. Rep. Kanazawa Univ. The Science Reports of the Kanazawa University. (Kanazawa)
- Sci. Rep. Res. Inst. Theoret. Phys. Hiroshima Univ. Scientific Reports of the Research Institute for Theoretical Physics, Hiroshima University. (Hiroshima)
- Sci. Rep. Res. Inst. Tôhoku Univ. Ser. A. The Science Reports of the Research Institutes. Tôhoku University. Series A. (Physics, Chemistry and Metallurgy). (Sendai)

- Sci. Rep. Saitama Univ. Ser. A. The Science Reports of the Saitama University. Series A. Mathematics, Physics and Chemistry. (Urawa)
- Sci. Rep. Téhoku Univ. Ser. I. The Science Reports of the Téhoku University. First Series. (Physics, Chemistry, Astronomy). (Sendai)
- Sei. Rep. Tokyo Kyoiku Daigaku Sect. A. Science Reports of the Tokyo Kyoiku Daigaku. Section A. (Tokyo)
- Sci. Rep. Yokohama Nat. Univ. Sect. I. Science Reports of the Yokohama National University. Section I. Mathematics, Physics. (Yokohama)
- Sci. Sinica. Scientia Sinica. (Peking)
- Scripta Math. Scripta Mathematics. A Quarterly Journal Devoted to the Philosophy, History, and Expository Treatment of Mathematics. (New York)
- SIAM Rev. SIAM Review. A Publication of the Society for Industrial and Applied Mathematics. (Philadelphia, Pa.)
- Sibirsk. Mat. Z. Sibirskii Matematičeskii Žurnal. (Moscow)
- Simon Stevin. Simon Stevin. Wis-en Natuurkundig Tijdschrift. (Groningen-Djakarta)
- Skund. Aktuarietidekr. Skandinavisk Aktuarietidskrift. (Uppeala)
- Skr. Norsks Vid.-Akad. Oslo I. Skrifter Utgitt av det Norske Videnakaps-Akademi i Oslo. I. Mat.-Naturv. Klasse. (Oslo)
- Slovenska Akad. Znan. Umet. Razred Mat. Fiz. Tehn. Vede Ser. A Razprave. Slovenska Akademija Znanosti in Umetnosti. Razred za Matematične, Fizikalne in Tehnične Vede. Serija A: Matematične, Fizikalne in Kemične Vede. Razprave. Academia Scientiarum et Artium Slovenica. Classis III: Mathematica, Physica, Technica. Series A: Mathematica, Physica, Chemica. Dissertationes. (Ljubljana)
- Smithsonian Contrib. to Astrophys. Smithsonian Contributions to Astrophysics. (Washington, D.C.)
- Soc. Actuar. Trans. Society of Actuaries. Transactions. (Chicago, III.)
- Soc. Parana. Mat. Anuário. Anuário da Sociedade Paranaense de Matemática. (Curitiba)
- Soc. Sci. Fenn. Comment. Phys.-Math. Societas Scientiarum Fennica. Commentationes Physico-Mathematicae. (Helsinki)
- Sec. Sei. Lettres Lódž Bull. Cl. III. Bulletin de la Société des Sciences et des Lettres de Lódž. Classe III des Sciences Mathématiques et Naturelles. (Lódž)
- Soobšč. Akad. Nauk Gruzin. SSR. Soobščenija Akademii Nauk Gruzinskol SSR. (Tiflis)
- South African J. Sci. South African Journal of Science. Suid-Afrikaanse Joernaal van Wetenskap. (Johannesburg)
- Soviet Astronom. AJ. Soviet Astronomy. AJ. (A translation of Astronomičeskii Žurnal of the Academy of Sciences of the USSR). (New York) (Translation of Astronom. Z.)
- Soviet Math. Dokl. Soviet Mathematics. Doklady. (A translation of the entire pure mathematics section of Doklady Abademii Nauk SSSR). (Providence, R.I.) (Translation of mathematics section of Dokl. Akad. Nauk SSSR)
- Soviet Physics Acoust. Soviet Physics. Acoustics. (A translation of Akustičsskii Žurnal of the Academy of Sciences of the USSR). (New York) (Translation of Akust. Z.)
- Soviet Physics Cryst. Soviet Physics. Crystallography. (A translation of the journal Kristallograftje of the Academy of Sciences of the USSR). (New York) (Translation of Kristallograftje)
- Soviet Physics Dokl. Soviet Physics. Doklady. (A translation of the physics sections of Doklady Akademii Nauk SSSR). (New York) (Translation of physics sections of Dokl. Akad. Nauk SSSR)
- Soviet Physics JETP. Soviet Physics. JETP. (A translation of Z. Eksperimental'noi i Teoretičeskoi Fiziki of the USSR). (New York) (Translation of Z. Eksper. Teoret. Fiz.)

- Soviet Physics Solid State. Soviet Physics. Solid State. (A translation of the journal Fixika Tverdogo Tela of the Academy of Sciences of the USSR). (New York) (Translation of Fis. Tverd. Tela)
- Soviet Physics Tech. Phys. Soviet Physics. Technical Physics. (A translation of Zurnal Tehničeskol Fiziki of the Academy of Sciences of the USSR). (New York) (Translation of Z. Tehn. Fiz.)
- Soviet Physics Uspekhi. Soviet Physics. Uspekhi. (A translation of Uspek Fisičeskih Nauk (Advances in the Physical Sciences) of the Academy of Sciences, U.S.S.R.). (New York) (Translation of Uspehi Fiz. Nauk.)
- Spisy Přírod. Fak. Univ. Brno. Spisy Přírodovědecké Fakulty University v Brně. Trudy Estestvenno-Istoričeskogo Fakul'teta Universiteta v g. Brno. Publications-de la Faculté des Sciences de l'Université à Brno. (Brno) (Formerly: Publ. Fac. Sci. Univ. Masaryk)
- SRI J. SRI Journal. (Menlo Park, Calif.) (Formerly listed as: SRI Journal)
- SRI Journal. SRI Journal. (Menlo Park, Calif.) See SRI J.
- Statistica (Bologna). Statistica. (Bologna)
- Stroje na Zpracování Informaci. Stroje na Zpracování Informaci. (Prague)
- Studia Logica, Polska Akademia Nauk, Komitet Filozoficzny, Studia Logica, (Warsaw)
- Studia Math. Polska Akademia Nauk. Studia Mathematica. (Warsaw)
- Studia Univ. Babeş-Bolyai Ser. I Math. Phys. Studia Universitatis Babeş-Bolyai. Series I. Mathematica Physica. (Cluj)
- Sudhoffe Arch. Sudhoffs Archiv für Geschichte der Medizin und der Naturwissenschaften. (Wiesbaden)
- Súgaku. Súgaku. (Tokyo)
- Summa Brasil. Math. Summa Brasiliensis Mathematicae. (Rio de Janeiro)
- Svenska Aeroplan A. B. Tech. Notes. SAAB Aircraft Company. Svenska Aeroplan Aktiebolaget. Technical Notes. (Linköping)
- Turtu Riiki. Ül. Teimetised. Tartu Riikiku Ülikooli Toimetised. Učenye Zapiski Tartuskogo Gosudarstvennogo Universiteta. Matemaatika-Loodusteaduskonna Töid. Trudy Estestvenno-Matematičeskogo Fakulteta. (Tallin)
- Tashkent. Gos. Ped. Inst. Učen. Zop. Ministerstvo Prosveščenija Uzbekskol SSR. Tashkentskii Gosudarstvennyi Pedagogičeskii Institut im. Nizami. Učenye Zapiski. Fiziko-Matematičeskii. (Tashkent)
- Tech. Rep. Engry. Res. Inst. Kyoto Univ. Technical Reports of the Engineering Research Institute. Kyoto University. (Kyoto)
- Tech. Transl. Technical Translations. (Washington, D.C.)
- Technometrics. Technometrics. A Journal of Statistics for the Physical, Chemical and Engineering Sciences. (Princeton, N.J.)
- Tensor. Tensor. New Series. (Sapporo)
- Teor. Vergiutnost. i Primenen. Akademija Nauk SSSR. Teorija Verojatnostel i ee Primenenija. (Moscow) (Translated as: Theor. Probability Appl.)
- Thalès. Thalès. Recueil Annuel des Travaux de l'Institut d'Histoire des Sciences et des Techniques de l'Université de Paris. (Paris)
- Theor. Probability Appl. Theory of Probability and its Applications.

  (An English translation of the Soviet journal Teorija Verojatnostei i es Primenenija). (Philadelphia, Pa.) (Translation of Teor. Verojatnost. i Primenen.)
- Theoria (Lund). Theoria. A Swedish Journal of Philosophy and Psychology. (Lund)
- Tôhoku Math. J. The Tôhoku Mathematical Journal. (Sendai)
- Tomsk. Gos. Univ. Učen. Zap. Tomskii Gosudarstvennyi Universitet im. V. V. Kuibyševa. Učenye Zapiski. (Tomsk)
- Topology. Topology. An International Journal of Mathematics.

- Trabajos Estadist. Trabajos de Estadistica. (Madrid)
- Trans. Amer. Inst. Elec. Engrs. Transactions of the American Institute of Electrical Engineers. (New York)
- Trans. Amer. Math. Soc. Transactions of the American Mathematical Society. (Providence, R.I.)
- Trans. Amer. Philos. Soc. Transactions of the American Philosophical Society Held at Philadelphia for Promoting Useful Knowledge. (Philadelphia, Pa.)
- Trans. ASME Ser. A. J. Engrg. Power. Transactions of the ASME. Series A. Journal of Engineering for Power. (New York)
- Trans. ASME Ser. B. J. Engrg. Indust. Transactions of the ASME. Series B. Journal of Engineering for Industry. (New York)
- Trans. ASME Ser. E. J. Appl. Mech. Transactions of the ASME. Series E. Journal of Applied Mechanics. (New York) (Formerly: J. Appl. Mech.)
- Trans. Faraday Soc. Transactions of the Faraday Society. (London)
- Trans. Roy. Soc. Edinburgh. Transactions of the Royal Society of Edinburgh. (Edinburgh)
- Trans. Roy. Soc. South Africa. Transactions of the Royal Society of South Africa. (Cape Town)
- Trav. Soc. Sci. Lett. Wrocław Ser. B. Travaux de la Société des Sciences et des Lettres de Wrocław. Seria B. (Wrocław)
- Trudy Akad. Nauk Litov. SSR Ser. B. Lietuvos TSR Mokslų Akademijos. Darbai. Serija B. Akademii Nauk Litovakol SSR. Trudy. Serija B. (Vilna)
- Trudy Inst. Istori. Estest. Tehn. Akademija Nauk SSSR. Trudy Instituta Istorii Estestvoznanija i Tehniki. (Moscow)
- Trudy Inst. Mařinoved. Sem. Točn. Mařinostr. Priborostr. Akademija Nauk SSR. Trudy Instituta Mašinovedenija. Seminar po Točnosti v Mašinostroenii i Priborostroenii. (Moscow)
- Trudy Inst. Teoret. Astronom. Akademija Nauk SSSR. Trudy Instituta Teoretičeskoĭ Astronomii. (Moscow)
- Trudy Kazan. Aviacion. Inst. Mat. i Meh. Trudy Kazanskogo Aviacionnogo Instituta. Matematika i Mehanika. (Kazan)
- Trudy Leningrad. Tehn. Inst. Trudy Kafedr. Meh. Fak. Ministerstvo Vysšego Obrazovanija SSSR. Trudy Leningradskogo Tehnologičeskogo Instituta im. Lensoveta. Trudy Kafedr Mehaničeskogo Fakul'teta. (Leningrad)
- Trudy Mat. Inst. Steklov. Akademija Nauk Sojuza Sovetakih Socialističeskih Respublik. Trudy Matematičeskogo Instituta im. V. A. Steklova. (Moscow-Leningrad)
- Trudy Samarkand. Gos. Univ. Mat. Ministerstvo Vysšego i Srednego Special'nogo Obrazovanija UzSSR. Trudy Samarkandskogo Gosudarstvennogo Universiteta im. A. Navoi. Matematika. (Samarkand)
- Trudy Sem. Vektor. Tenzor. Anal. Trudy Seminara po Vektornomu i Tenzornomu Analizu s ih Priloženijami k Geometrii, Mehaniki i Fiziki. (Moscow)
- Trudy Tashkent. Gos. Univ. Trudy Tashkentskogo Gosudarstvennogo Universiteta im. V. I. Lenina. Matematika. (Tashkent)
- Trudy Tomsk. Gos. Univ. Ser. Meh.-Mat. Geom. Sb. Trudy Tomskogo Gosudarstvennogo Universiteta im. V. V. Kulbyševa. Serija Mehaniko-Matematičeskaja. Geometričeskii Sbornik. (Tomsk)
- Trudy Vyčisl, Centra Akad, Nauk Gruzin, SSR, Akademija Nauk Gruzinskoï SSR, Trudy Vyčislitel'nogo Centra. (Tiflis)
- Tul'sk. Gos. Ped. Inst. Učen. Zap. Fiz.-Mat. Nauk. Tul'ski. Gosudarstvennyl Pedagogičeskil Institut im. L. N. Tolstogo. Učenye Zapiski. Fiziko-Matematičeskie Nauki. (Tula)
- U.S.S.R. Comput. Math. and Math. Phys. U.S.S.R. Computational Mathematics and Mathematical Physics. (Oxford) (Translation of Z. Vučisl. Mat. i Mat. Fiz.)
- Učen. Zap. Borisoglebsk. Gos. Ped. Inst. Ministerstvo Prosveščenija RSFSR. Učenye Zapiski. Borisoglebskogo Gosudarstvennogo Pedagogičeskogo Instituta. (Borisoglebsk)
- Učen, Zap. Karel, Ped. Inst. Ser. Piz.-Mat. Nauk. Ministerstvo Prosveščenija RSFSR. Karel'skiĭ Pedagogičeskiĭ Institut. Učenye Zapiaki. Serija Fiziko-Matematičeskih Nauk. (Petrozavedsk)

Ukrain. Mat. Ž. Akademija Nauk Ukrainskol SSR. Institut Matematiki, Ukrainskil Matematičeskil Žurnal. (Kiev) Ve

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- Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fis. Universitet u Beogradu. Publikacije Elektrotehničkog Fakulteta. Serija Matematika i Fizika. (Belgrade)
- Univ. Bergen Arbok Naturvit. Rekke. Universitet i Bergen Arbok. Naturvitenskapelig Rekke. (Bergen) (Continued as: Arbok Univ. Bergen Mat.-Nat. Ser.)
- Univ. Buenos Aires Contrib. Ci. Ser. Fis. Universidad de Buenos Aires. Facultad de Ciencias Exactas, Fisicas y Naturales. Contribuciones Científicas. Serie Física. (Buenos Aires)
- Univ. Buenos Aires Contrib. Ci. Ser. Mat. Universidad de Buenos Aires. Facultad de Ciencias Exactas y Naturales. Contribuciones Científicas. Serie Matematica. (Buenos Aires)
- Univ. California Publ. Math. University of California. Publications in Mathematics. (Berkeley-Los Angeles, Calif.)
- Univ. California Publ. Statist. University of California. Publications in Statistics. (Berkeley-Los Angeles, Calif.)
- Univ. Central Venezuela Bol. Fac. Ing. Universidad Central de Venezuela. Boletin de la Facultad de Ingenieria. (Caracas)
- Univ. e Politec. Torino Rend. Sem. Mat. Università e Politecnico di Torino. Rendiconti del Seminario Matematico (già "Conferenze di Fisica e di Matematica"). (Turin)
- Univ. Illinois Bull. Engrg. Exper. Station Bull. University of Illinois. Bulletin. Engineering Experiment Station Bulletin. (Urbans, Ill.)
- Univ. Lieboa Revista Fac. Ci. A. Universidade de Lieboa. Revista da Faculdade de Ciências. 2.\* Série. A. Ciências Matemáticas. (Liebon)
- Univ. Madrid Publ. Sec. Mat. Fac. Ci. Universidad de Madrid. Publicaciones de la Sección de Matemática de la Facultad de Ciencias. (Madrid)
- Univ. Nac. La Plata Publ. Fac. Ci. Fisicomat. Serie Segunda Rev. (or Contrib.) Universidad Nacional de la Plata. Publicaciones de la Facultad de Ciencias Fisicomatemáticas. Serie Segunda. Revista (or Contribuciones). (La Plata)
- Univ. Nac. La Plata Publ. Fac. Ci. Fisicomat. Serie Tercera Publ. Esp.
  Universidad Nacional de la Plata. Publicaciones de la Facultad
  de Ciencias Fisicomatemáticas. Serie Tercera. Publicaciones
  Especiales. (La Plata)
- Univ. Nac. Tucumán Publ. Universidad Nacional de Tucumán. Publicación. (Tucumán)
- Univ. Nac. Tucumán Rev. Ser. A. Universidad Nacional de Tucumán.
  Facultad de Ciencias Exactas y Tecnologia. Revista. Serie A.
  Matemáticas y Física Teórica. (Tucumán)
- Univ. Repúb. Fac. Ingen. Agrimens. Montevideo Publ. Inst. Mat. Estadist. Universidad de la República. Facultad de Ingenieria y Agrimensura. Mortevideo-Uruguay. Publicaciones del Instituto de Matemática y Estadistica. (Montevideo) (Formerly: Fac. Ingen. Montevideo Publ. Inst. Mat. Estadist.)
- Uspehi Fiz. Nauk. Akademija Nauk SSSR. Uspehi Fizičeskih Nauk. (Moscow-Leningrad) (Translated as: Soviet Physics Uspekhi)
- Uspehi Mat. Nauk. Akademija Nauk SSSR i Moskovskoe Matematičeskoe Obščestvo. Uspehi Matematičeskih Nauk. (Moscow-Leningrad) (Selected articles translated as: Russian Math. Surveys)
- Užgorod. Gos. Univ. Naučn. Zop. MVO USSR. Užgorodskii Gosudarstvennyi Universitet. Naučnye Zapiski. (Lvov)
- Verh. Nederl. Akad. Wetenech. Afd. Natuurk. Sect. I. Verhandelingen der Koninklijke Nederlandse Akademie van Wetenschappen, Afdeeling Natuurkunde. Eerste Sectie. (Amsterdam)
- Vesci Akad. Navuk BSSR Ser. Fiz.-Tèhn. Navuk. Vesci Akadèmii Navuk BSSR. Serija Fizika-Tèhničnyh Navuk. (Minak)
- Vestnik Akad. Nauk Kazah. SSR. Vestnik Akademii Nauk Kazahskol SSR. (Alma-Ata)
- Vestnik Leningrad. Univ. Vestnik Leningradskogo Universiteta. (Leningrad) (See Vestnik Leningrad. Univ. Ser. Fiz. Him. and Vestnik Leningrad. Univ. Ser. Mat. Meh. Astronom.)

- Vestnik Leningrad. Univ. Ser. Fiz. Him. Vestnik Leningradskogo Universiteta. Serija Fiziki, Himii. (Leningrad) (Formerly listed as: Vestnik Leningrad. Univ.)
- Vestnik Leningrad. Univ. Ser. Mat. Meh. Astronom. Vestnik Leningradskogo Universiteta. Serija Matematiki, Mehaniki i Astronomi. (Leningrad) (Formerly listed as: Vestnik Leningrad. Univ.)

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- Vestnik Moskov. Univ. Ser. I Mat. Meh. Vestnik Moskovakogo Universiteta. Serija I. Matematika, Mehanika. (Moscow)
- Vestnik Moskov. Univ. Ser. III Fiz. Astronom. Vestnik Moskovakogo Universiteta. Serija III. Fizika, Astronomija. (Moscow)
- Vestnik Statist. Vestnik Statistiki. Organ Central'nogo Statisčeskogo Upravlenija pri Sovete Ministrov SSSR. (Moscow)
- Vierteljahrs. Naturforsch. Ges. Zürich. Vierteljahrsschrift der Naturforschenden Gesellschaft in Zürich. (Zürich)
- Vijnana Parishad Anusandhan Patrika. Vijnana Parishad Anusandhan Patrika [The Research Journal of the Hindi Science Academy]. (Allahabad)
- Vilniaus Valst. Univ. Mokslo Darbai Mat. Fiz. Chem. Mokslų Ser. TSRS Aukštojo Mokslo Ministerija. Vilniaus Valstybinis Universitetas. Mokslo Darbai. Matematikos, Fizikos ir Chemijos Mokslų Serija. Ministerstvo Vysšego Obrazovanija SSR. Vil'njusskii Gosudarstvennyi Universitet. Učenye Trudy. Serija Matematičeskih, Fizičeskih i Himičeskih Nauk. (Vilna)
- Virginia J. Sci. The Virginia Journal of Science. A Journal Issued Quarterly by the Virginia Academy of Science. (Blacksburg, Va.)
- Voprosy Istor. Estest. i Tehn. Akademija Nauk SSSR. Voprosy Istorii Estestvoznanija i Tehniki. (Moscow)
- Voprosy Kosmog. Akademija Nauk SSSR. Voprosy Kosmogonii.
  (Moscow)
- Voprosy Meh. Moskovskii Gosudarstvennyi Universitet im. M. V. Lomonosova. Voprosy Mehaniki. (Moscow)
- Vsesojuz. Zaočn. Inst. Inž. Železn. Transport. Učen. Zap. Trudy Kafedr Vysš. Mat. i Teoret. Meh. SSSR. Ministerstvo Putel Soobščenija Vsesojuznyl Zaočnyi Institut Inženerov Železnodorožnogo Transporta. Učenye Zapiski. Trudy Kafedr Vysšel Matematiki i Teoretičeskol Mehaniki. (Moscow)
- Vyčisl. Mat. Akademija Nauk SSSR. Vyčislitel'nyĭ Centr. Vyčislitel'naja Matematika. (Moscow)
- Wiadom. Mat. Rozzniki Polskiego Towarzystwa Matsmatycznego. Ser. II. Wiadomości Matematyczne. (Warsaw)
- Wiss. Z. Ernst-Moritz-Arndt-Univ. Greifewald Math.-Nat. Refle.
  Wissenschaftliche Zeitschrift der Ernst-Moritz-Arndt-Universität
  Greifswald. Mathematisch-Naturwissenschaftliche Reihe. (Greifswald) (Formerly: Wiss. Z. Univ. Greifswald Math.-Nat. Reihe)
- Wiss. Z. Friedrich-Schiller-Univ. Jena/Thüringen. Wissenschaftliche Zeitschrift der Friedrich-Schiller-Universität Jena/Thüringen. (Jena/Thüringen)
- Wiss, Z. Hochsch. Elektrotech. Ilmenau. Wissenschaftliche Zeitschrift der Hochschule für Elektrotechnik. Ilmenau. (Ilmenau)
- Wiss. Z. Hochsch. Schwermaschinenbau Magdeburg. Wissenschaftliche Zeitschrift der Hochschule für Schwermashinenbau. Magdeburg. (Magdeburg) (Continued as: Wiss. Z. Techn. Hochsch. Otto von Guericke Magdeburg)
- Wiss. Z. Humboldt-Univ. Berlin Math.-Nat. Reihe. Wissenschaftliche Zeitschrift der Humboldt-Universität Berlin. Mathematisch-Naturwissenschaftliche Reihe. (Berlin)
- Wiss, Z. Karl-Marx-Univ. Leipzig Math.-Nat. Reihe. Wissenschaftliche Zeitschrift der Karl-Marx-Universität Leipzig. Mathematisch-Naturwissenschaftliche Reihe. (Leipzig)

- Wiss. Z. Martin-Luther-Univ. Halle-Wittenberg Math.-Nat. Reihe, Wissenschaftliche Zeitschrift der Martin-Luther-Universität Halle-Wittenberg, Mathematisch-Naturwissenschaftliche Reihe. (Halle-Wittenberg)
- Wiss. Z. Pddagog. Hochsch. Potsdam Math.-Nat. Reihe. Wissenschaftliche Zeitschrift der Pädagogischen Hochschule Potsdam. Mathematisch-Naturwissenschaftliche Reihe. (Potsdam)
- Wiss. Z. Techn. Hochsch. Chem. Leung-Merseberg. Wissenschaftliche Zeitschrift der Technischen Hochschule für Chemie Leuna-Merseburg. (Leuna-Merseburg)
- Wiss. Z. Techn. Hochsch. Dresden. Wissenschaftliche Zeitschrift der Technischen Hochschule Dresden. (Dresden)
- Wiss. Z. Techn. Hochsch. Otto von Guericke Magdeburg. Wissenschaftliche Zeitschrift der Technischen Hochschule Otto von Guericke Magdeburg. (Magdeburg) (Formerly: Wiss. Z. Hochsch. Schwermaschinenbau Magdeburg)
- Wiss. Z. Univ. Greifswald Math.-Nat. Reihe. Wissenschaftliche Zeitschrift der Universität Greifswald. Mathematisch-Naturwissenschaftliche Reihe. (Greifswald) (Continued as: Wiss. Z. Ernst-Moritz-Arndt-Univ. Greifswald Math.-Nat. Reihe)
- Yokohama Math. J. Yokohama Mathematical Journal. (Yokohama)
- Z. Angew. Math. Mech. Zeitschrift für Angewandte Mathematik und Mechanik. Ingenieurwissenschaftliche Forschungsarbeiten. (Berlin)
- Z. Angew. Math. Phys. Zeitschrift für Angewandte Mathematik und Physik. ZAMP. Journal of Applied Mathematics and Physics. Journal de Mathématiques et de Physiques Appliquées. (Basel)
- Z. Angew. Phys. Zeitschrift für Angewandte Physik. (Berlin)
- Z. Astrophys. Zeitschrift für Astrophysik. (Berlin-Göttingen-Heidelberg)
- Z. Eksper. Teoret. Fiz. Akademija Nauk SSSR. Žurnal Eksperimentalnol i Teoretičeskol Fiziki. (Moscow) (Translated as: Soviet Physics JETP)
- Z. Flugwiss. Zeitschrift für Flugwissenschaften. (Braunschweig)
- Z. Math. Logik Grundlagen Math. Zeitschrift für Mathematische Logik und Grundlagen der Mathematik. (Berlin)
- Z. Metsorol. Zeitschrift für Meteorologie. (Berlin)
- Z. Naturforsch. Zeitschrift für Naturforschung. (Tübingen)
- Z. Physik. Zeitschrift für Physik. (Berlin-Göttingen-Heidelberg)
- Tehn. Fiz. Akademija Nauk SSSR. Zurnal Tehničeskol Fiziki. (Moscow-Leningrad) (Translated as: Soviet Physics Tech. Phys.)
- Z. Vyčisl. Mat. i Mat. Fiz. Akademija Nauk SSSR. Žurnal Vyčislitel'no! Matematiki i Matematičesko! Fiziki. (Mosoow) (Translated as: U.S.S.R. Comput. Math. and Math. Phys.)
- Z. Wahrscheinlichkeitstheorie und Verw. Gebiete. Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete. (Berlin)
- Zastos. Mat. Polska Akademia Nauk. Instytut Matematyczny. Zastosowania Matematyki. (Warsaw)
- Zbl. Zentralblatt für Mathematik und ihre Grenzgebiete. (Berlin-Göttingen-Heidelberg)
- Zbl. Math. Zentralblatt für Mathematik und ihre Grenzgebiete. (Berlin-Göttingen-Heidelberg) (Usually abbreviated Zbl in the text of Math. Reviews)
- Zeszyty Nauk, Uniw. Jagiello. Prace Mat. Zeszyty Naukowe Uniwersytetu Jagiellońskiego. Prace Matematyczne. (Matematyka, Fizyka, Chemia) (Kraków)
- Zeezyty Nauk. Uniw. Mickiewicza. Zeezyty Naukowe Uniwerzytetu im. A. Mickiewicza. (Poznań)

# ERRATA AND ADDENDA

#### VOLUME 23

#A2128: Grünbaum, B.

The reviewer requests that the word "known" be deleted from line 9 of the review.

#A2881 : Barratt, M. G.

The reviewer states that he inadvertently attributed the theorem that the stable homotopy groups of spheres are graded commutative to Toda; the reference should be to M. G. Barratt and P. J. Hilton [Proc. London Math. Soc. (3) 3 (1953), 430-445; MR 15, 643]. Toda considered the last non-stable dimension.

#B1911: Nakanishi, Noboru

The reviewer asks that the last sentence of the first paragraph be deleted.

#### VOLUME 24

#A1806: Rakčeev, E. N.

After the date 1961 in the heading, add "no. 4".

#A2843: Kaz'min, Ju. A.

Change "Ser. i" in the heading to "Ser. I" and insert "no. 6" after the date 1961.

#A2961: Milnor, John

In line 5 of the third paragraph of the review, read "homomorphism" instead of "homeomorphism", and in line 21 of the same paragraph, delete "of  $L_q \times R^n$ ".

#A3127: Brenner, J. L.

In line 4 of the review, replace  $(-1)^N$  by  $(-1)^{N+1}$ .

#A3367: Alekseev, V. M.

After the date 1961 in the heading, add "no. 3".

#A3732: Anderson, T. W.

The reviewer adds the following clause to the last sentence of the review: "... [for all  $F \in \mathcal{F}$ ], provided either the estimate is a sample mean or the number of observations is equal to the number of variables. However, if neither of these conditions holds and a certain rank condition is satisfied, the result is shown not to be true."

#B1302: Eremeev, N. V.

Following the date 1961 in the heading, add "no. 6".

#B1303: Lju, Jan'-čžu [Liu, Yan-chu]

Following the date 1961 in the heading, add "no. 4".

#B1310: Harlamov, S. A.

Following the date 1961 in the heading, add "no. 6".

#B1349: Koltunov, M. A.

Following the date 1961 in the heading, add "no. 3".

#B1383 : Il'jušin, A. A.

Following the date 1961 in the heading, add "no. 3".

#B1390: Bagdoev, A. G.

Following the date 1961 in the heading, add "no. 3".

#B1494: Zuravlev, A. G.

Following the date 1961 in the heading, add "no. 6".

#B1737: Savinov, G. V.

Following the date 1961 in the heading, add "no. 3".

#B1779: Kiškina, Z. M.; Kreines, M. A.

Following the date 1961 in the heading, add "no. 6".

#B2309: Cirlin, Ju. A.; Pargamanik, L. È.; Dalč, A. R. Both dates in the heading should be 1962.

#B2547: Budak, B. M.; Gorbunov, A. D.

Following the date 1961 in the heading, add "no. 4".

#### VOLUME 25

#125: Suprunenko, D. A.

The reviewer adds that the proof of Theorem 1 remains valid over every perfect field, so that the theorem holds in this more general case.

#915: Hapaljuk, A. P.

Both dates in the heading should be 1962.

#1355: El'sgol'e, L. È.

Following the year 1961 in the heading, insert "no. 6".

#1356: Èl'sgol'e, L. È.

Following the year 1961 in the heading, insert "no. 6".

#1535 : Stone, A. H.

In line 13 of the review, replace "locally compact" by " $\sigma$ -locally compact".

#1545: Chu, Hsin

In line 11 of the review the phrase " $C(X) \rightarrow C(R)$  is into" should be replaced by " $C(X) \rightarrow C(T)$  is one-to-one".

#### VOLUME 25-Continued

#2428: Vegrin, L. D.

Following the date 1961 in the heading, add "no. 4".

#2600: Tynjanskii, N. T.

Following the date 1961 in the heading, add "no. 3".

#3018: Segal, Sanford, L.

Delete the word "and" in line 6 of the review.

#3321: Konjuškov, A. A.

In line 4 of the review replace the word "Thus" by "Here".

#3925: Hasse, H.

In the displayed formula, read  $\sum_{x=1}^{m} \chi(x)x^{n-1}$  in place of  $\sum_{x=1}^{m} (x)x^{n-1}$ .

#4121: Temko, K. V.

In the heading change Učebn. to Učen.

#4740: Agostinelli, Cataldo

The reviewer, whose name should correctly be spelled Moffatt, indicates (1) that the title of the paper is "Sul un...", not "Su un..."; (2) that the correct reference to Stokes is Trans. Cambridge Philos. Soc. 9 (1849), part I, 1; and (3) that the equation in line 4 of the second paragraph of the review should be  $d\omega_1/dt + \{(a^2 + b^2) - (a^2 + c^2)\}\omega_2\omega_3 = 0$ .

#### TRANSLITERATION OF RUSSIAN

Russian Letter Cap. Ital.		Mathematical Reviews	Zentralblatt für Mathematik	Bulletín Signalétique	Applied Mechanics Reviews	Science Abstracts	U.S. Library of Congress	Amer. Slavic & E. European Review	Journal of Symbolic Logic
A	a	8	a	a	8	a	a.	8	a
Б	6	b	b	b	b	b	b	b	b
B		v	v	v	v	v	v	V	V
Г	2	g	g	g	g d	g	g	g	g
Д	9	d	d	d	d	d	d	d	d
B		0	0	0	0	е	0	6	6
E	8	0	0	ě	ē	ē	ē	ě	6
Ж	ж	ž	ž	zh	zh	zh	zĥ	ž	ž
3	3	2	Z	z	Z	Z	Z	Z	Z
И	24	i	i	i	i	i	i	i	i
Й	ũ	ĭ	j	j	ĭ	ĭ	ĭ	j	j
K	K	k	k	k .	k	k	k	k	k
Л	A	1	1	1	1	1	1	1	1
M	M	m	m	m	m	m	m	m	m
H	N	n	n	n	n	n	n	n	n
0	0	0	0	0	0	0	0	0	0
П	21	p	p	p	P	p	P	P	p
P	p	r	r	r	r	r	r	r	r
C	c	8	8	8		8	8	8	8
T	m	t	t	t	t	t	t	t	t
У	y	u	u	u	u	u	u	u	u
Φ	ø	f	f	f	f	f	f	f	f
X	x	h	ch	kh	kh	kh	kĥ	kh	h
Ц	24	0	C	0	ta	ts	tis	0	0
ч	ų	ě	ŏ	ch	ch	ch	ch	ŏ	ě
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